

**SHADOW OPEN MARKET COMMITTEE**  
**Policy Statement and Position Papers**

**September 21-22, 1980**

**PPS-80-4**

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## SHADOW OPEN MARKET COMMITTEE

The Committee met from 2:00 p.m. to 8:00 p.m. on Sunday, September 21, 1980.

### Members:

PROFESSOR KARL BRUNNER, Director of the Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester, Rochester, New York

PROFESSOR ALLAN H. MELTZER, Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh, Pennsylvania

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PROFESSOR ROBERT RASCHE, Department of Economics, Michigan State University, East Lansing, Michigan

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DR. BERYL SPRINKEL, Executive Vice President and Economist, Harris Trust and Savings Bank, Chicago, Illinois

DR. ANNA SCHWARTZ, National Bureau of Economic Research, New York, New York



POLICY STATEMENT  
Shadow Open Market Committee  
September 22, 1980

In October 1979, Chairman Volcker announced a major change in policy to control money and reduce inflation. We hoped that a change had in fact been made. We now know that our hopes were ill-founded.

The Federal Reserve has not controlled money and bank reserves, as promised. In the year ending with the third quarter of 1979, adjusted bank reserves rose 4.3 percent. In the last year, the rate has nearly doubled. Increased variability of weekly reported bank reserves flatly contradicts the Federal Reserve statements that it has implemented new procedures.

The growth rate of M-1B has been reduced on average over the past 11 months, but its variability has been substantially higher than in years before October 1979. The familiar pattern of high-money growth during business expansions and low-money growth during business contractions remains. We therefore doubt that the slower growth of money will persist.

Uncertain, erratic and mistaken government policies cloud the future outlook and dominate the current discussion. The Federal Reserve has not kept its repeated commitment to slow inflation by gradually and persistently reducing money growth. The government has issued misleading estimates of current and future budgets. The mid-year budget review presumes that the Congress will approve hospital cost containment, a 10 cent per gallon tax on gasoline and diesel fuel, and other tax proposals that Congress has rejected. The Congress has disregarded its rules by delaying the 1981 second budget resolution, which was due September 15.

Government policies continue to reward present rather than future consumption, to favor the nonproducer at the expense of the producer, and to emphasize redistribution and not expansion of income and wealth. As a consequence, real GNP per employed worker grew at an annual rate of less than 1 percent in the 1970's, two-fifths the pace of the prior 20 years. It is specious to talk about revitalizing the economy without a serious plan to reduce both inflation and the real size of government.

The combined effect of frequent and unpredictable changes in the budget, the use of credit controls, highly variable money growth, the absence of a fiscal plan, and a vacillating position on the level and growth of defense spending heightens uncertainty about future inflation, deepens the current recession, deters long-term investment, and reduces future income. It is shameful that no one knows the fiscal plan at the start of the fiscal year. It is shameful, also, that no one can guess whether the Federal Reserve will reach its announced targets or miss by 50 percent or 100 percent. And it is shameful that the Federal Reserve has not made many of the procedural and regulatory changes that would increase control of money growth.

Since 1973, the Shadow Open Market Committee has urged past and present Administrations, several Congresses and the Federal Reserve to replace fine tuning with budget, monetary, and trade policies that can eliminate inflation in three to five years while restoring growth of income and output to historic norms.

Neither these goals nor the means of reaching them are now in dispute. Many government officials acknowledge that attempts to fine tune the economy failed. They recognize that uncertainty about the future has been increased and the credibility of government officials has been reduced by these failures. And they see that the failures have left the country with slow growth of productivity and output, a bloated government, and high inflation.

Tax reduction without reduction of government spending increases the deficit, but does not change the tax burden that must be borne in the future by those who plan today for better jobs, by those who consider shifting from welfare to work, and by those who consider building new plants and installing new equipment. We estimate that proposed tax reductions in fiscal 1981 without reduction of government spending will produce a deficit of \$80- to \$85-billion and an additional \$40-billion in 1982.

There are no short-term, low-cost solutions to our economic problems. A government that has squandered its credibility, at home and abroad, cannot expect quick, favorable responses to anti-inflation policy. But undue pessimism is inappropriate.

### Monetary Policy and Inflation

Inflation is not intractable. Each of the last three attempts to slow inflation by reducing money growth — in 1966, 1969/70 and 1974/75 — was followed by

slower inflation. Using the deflator for GNP as the measure of inflation (to avoid the effect of large swings in interest rates and housing prices on the Consumer Price Index) we find:

| <u>Cyclical<br/>Decline</u> | <u>Peak rate of<br/>inflation</u> | <u>Percentage point<br/>reduction in<br/>rate of<br/>inflation*</u> | <u>Number of quarters<br/>between peak<br/>and trough in<br/>the rate of inflation</u> |
|-----------------------------|-----------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1966/67                     | 04.8%                             | <del>5.5</del> 3.3                                                  | 4                                                                                      |
| 1969/70                     | 06.4%                             | 2.7                                                                 | 4                                                                                      |
| 1974/75                     | 12.6%                             | 9.0                                                                 | 5                                                                                      |

\*Peak to trough.

The 1974/75 peak rate of inflation mixes the one-time effects of oil price increases and devaluation of the dollar with the maintained rate of inflation and, therefore, overstates the peak rate of inflation and the subsequent decline. Nevertheless, the data show that the rate of inflation was brought to 3.6 percent in the first quarter of 1976.

We need not place excessive reliance on the numbers for particular quarters to recognize the basic point. The failure to control inflation is the result of repeated failure to persist in policies that work. Before the rate of inflation reached its cyclical trough, stimulative policies were put in place. The shift from anti-inflation policies to policies of monetary and fiscal expansion raised the rate of inflation to higher levels. Such a shift appears to be taking place now.

The amount by which the rate of inflation can be reduced in the next two to three years is not fixed in the stars. It depends on the rate of money growth, on the credibility of monetary policy, and on the fiscal policy that accompanies slower monetary growth.

We favor an immediate end to the highly inflationary monetary policy of the past three to four months. We state our objectives in terms of the growth rate of the monetary base pending the prospective institutional change affecting the growth rates of other monetary aggregates. We urge the Federal Reserve to return the monetary base to the 6 percent growth path reached in the second quarter of 1980 and to reduce the growth of the base to 5 percent in 1981 and to 4 percent in 1982.

The Federal Reserve can reduce uncertainty about current policy by allowing interest rates and exchange rates to change as much as is required to control the

monetary base, by eliminating lagged reserve accounting, and by floating the discount rate. In addition, the Federal Reserve has a clear obligation to disclose the specific targets for growth in the monetary base and bank reserves that are now established each month by the Federal Open Market Committee. The Federal Reserve can reduce uncertainty about future policy by announcing the growth rate of money aggregates for the next two or three years as some members of Congress have urged, and by achieving the pre-announced growth rates. A Congressional resolution endorsing the policy of sustained, gradual pre-announced reductions in money growth would reduce one additional source of uncertainty. The House Banking Committee unanimously endorsed a policy of this kind more than a year ago. A renewal of the commitment would be timely and helpful.

### Fiscal Policy and Growth

Monetary policy can end inflation without supporting fiscal policy, but the chance that it will accomplish this is small. Fiscal expansion makes anti-inflation monetary policy less credible by increasing the size of the budget deficit, raising real interest rates and adding to the widespread belief that the Federal Reserve will finance the deficit by raising money growth as it has in the past.

A responsible fiscal policy can do more than support monetary policy. Fiscal policy can contribute to long-term growth. Congress and the President gave too much attention this year to the chimera of a balanced budget and too little attention to the levels of spending and to anticipated future taxes. A quick tax cut and enlarged budget deficit is not a permanent tax cut. The real cost of government is more closely related to the amount of resources government extracts in current and future taxes than to current tax collections. Reducing inflation reduces one type of tax, the inflation tax on income and wealth, and shifts the burden of financing the budget elsewhere. An income tax cut without an equivalent cut in spending has a similar effect; taxes are shifted elsewhere, and incentives to produce are left unchanged.

To increase real growth we must increase saving, investment, and productivity growth. We must absorb more of the long-term unemployed into the labor force. Marginal tax rates on long-term investment are high, but so are the marginal tax rates faced by savers and welfare recipients alike. A tax cut that increases investment at the expense of consumption is desirable if we want to increase real growth toward its historic norm, but a tax cut accompanied by a reduction in the growth of government spending is even more desirable.

The case for simultaneous reductions in government spending and taxes is strengthened when we consider the real effects of recent oil shocks. The oil price increases of 1974 and 1979/80 made all of us poorer because we must pay taxes, or tribute, to OPEC. Real income and wealth have been reduced. The share of government spending has increased, so the entire loss of income from the oil shocks has fallen on private consumption and private investment.

Congress must shift some of the real cost of the oil shocks of 1974 and 1979/80 away from private consumption and investment to public sector employees and public sector programs. Attempts to slow the growth of Federal spending are unlikely to be successful unless rapidly growing transfer payments are restructured.

One Congress cannot bind the next. Nevertheless, a commitment by Congress to a reduction in the share of government is a commitment to lower average and, presumptively, lower marginal tax rates in the future. A Congressional budget resolution that promises to reduce the relative size of government has importance far beyond the expression of intent. The resolution would be a signal to the public, to savers and investors at home and abroad, that the Congress recognizes that private investment and saving have been deterred by inflation, by uncertainty about future tax rates, by policies that shifted resources from private to public hands, and by programs that reduced incentives to work and to invest. A commitment to reduce the relative size of government to 20 percent of GNP would be an announcement that Congress intends to roll back more than half of the increase in the size of government that has occurred since the late Fifties.

The aim of our proposals is to improve the present by improving the future, and to improve the future by raising current anticipations of the risk adjusted real returns to capital and labor. We have had enough experience with fine-tuning on the demand side to be skeptical about fine-tuning of supply also. Economists know a great deal more about the long-term effects of policy on growth, employment, and inflation than about the short-term trade-offs that receive so much attention.

Fiscal and monetary policies are the core of any program to restore growth and reduce inflation. Reduction in tariff and non-tariff barriers to trade, repeal of legislation authorizing credit controls, reduction in the burden of regulation, and elimination of the Council on Wage and Price Stability would also contribute to the belief that the Administration and Congress recognize, at last, that the problems of inflation and slow growth cannot be removed by a quick fix or another round of stop and go.



FISCAL POLICY  
(A Report to the Shadow Open Market Committee)

Rudolph G. Penner  
American Enterprise Institute

Introduction

In January 1979, the President's 1980 budget recommended fiscal 1980 outlays of \$531.6 billion. In July 1980, the outlays for fiscal 1980 are estimated at \$578.8 billion, an increase of 8.9 percent. In that same 1980 budget, 1981 outlays were projected at \$578.0 billion. The July 1980 estimate is \$633.8 billion, an increase of 9.7 percent, and there is no reason to believe that upward adjustment for 1981 have come to an end.

Roughly \$10 billion of the 1980 increase and \$20 billion of the 1981 increase was the result of unexpected and probably justifiable increases in defense outlays. It cannot be said that the remaining increases in the estimates were entirely due to presidential or congressional profligacy. There was some of that, but I would argue that the current Congress has been remarkably restrained, given the coincidence of a recession and an election year. Nothing comparable to the anti-recession spending of 1975/76 or the stimulus program of 1977 has been initiated. Instead, the large increases in non-defense spending largely indicate the extent to which the budget is on automatic pilot. Spending is out of control in the legal sense that it can soar without new legislation and in the technical sense that it is extraordinarily difficult to predict from quarter to quarter.

In the good old days of the 1950's, it took significant legislation to make spending grow. Overstating the case only slightly, it now takes significant and highly courageous legislation to stop spending from growing. With the explosion of entitlement programs in the late 1960's and early 1970's and the advent of indexing, outlays became highly sensitive to economic and demographic variables given constant law. It is also sensitive to bureaucratic discretion in areas such as trade adjustment and disaster assistance. In other words, past Congresses signed a lot of blank checks. Current and future Congresses have to deal with the fact that they are now being cashed.

### The Administration's July Projections

Table 1 provides an adjusted set of the Administration's short and long-run budget projections as they existed in July. The footnote to the table explains the economic assumptions underlying the projections and various adjustments that I have made to reflect the fact that several Administration revenue raising and cost saving proposals have been rejected by the Congress — some by overwhelming margins — and are unlikely to be reconsidered.

The table clearly indicates that tax burdens will soar relative to GNP under current law, but because we start with a major deficit in 1979 and because outlays are higher relative to GNP in 1985 than in 1979, there is little margin for either tax cutting or new programs through the period if balanced budgets are deemed desirable. Projected 1985 receipts exceed outlays by only 8 percent. A tax cut of any significance in 1981 implies that a balanced budget must be put off at least until 1984 unless spending is slashed dramatically or the economy performs much better than is assumed.

Of course, many argue that a tax cut is just the medicine required for better economic performance. It is further argued that the better economic performance will generate additional government revenues which reduce the impact of the tax cut on the deficit. But one has to be careful in applying such arguments to the revenue estimates to table 1.

If one believes that changes in tax rates are very important in affecting economic growth, then it is hard to conclude that the growth path underlying table 1 is attainable given the significant tax increases implied by current law. Therefore, some tax cut is necessary just to attain that path. No revenue feedback can be assigned to that portion of any major tax cut. The question then becomes how much of a tax cut is required to achieve this path and how much would any additional cut enhance economic performance. I shall return to this issue later.

### The President's New, New, New Budget

Since July, the President has himself proposed various spending increases and tax cuts to fight the recession. On a static basis, they would increase the fiscal 1981 deficit by \$12.0 billion; convert the 1983 surplus of \$5.8 billion to a deficit of over \$35 billion; reduce the 1985 margins from \$82.1 billion to less than \$30 billion.

It is hard to predict how the Congress will react to these proposals. Action on the 1981 budget is unlikely to be completed until after the election, even though

TABLE 1: Actual and Projected Budget Totals, Selected Fiscal Years, 1979-1985  
(in billions of dollars)

|                | Actual  |          | Projected |          |         |          |         |          |
|----------------|---------|----------|-----------|----------|---------|----------|---------|----------|
|                | 1979    |          | 1981      |          | 1983    |          | 1985    |          |
|                | Dollars | % of GNP | Dollars   | % of GNP | Dollars | % of GNP | Dollars | % of GNP |
| Receipts       | 465.9   | 20.1     | 597.1     | 21.8     | 800.5   | 23.0     | 1031.2  | 23.9     |
| Outlays        | 493.7   | 21.3     | 634.2     | 23.1     | 794.7   | 22.8     | 949.1   | 22.0     |
| Budget balance | -27.7   | -1.2     | -37.1     | -1.4     | +5.8    | +0.2     | +82.1   | +1.9     |

NOTE: The estimates are based on the following economic assumptions. Real GNP grows at an average annual rate of 2.5 percent between calendar years 1979 and 1985. The average inflation rate, as measured by the consumer price index, is 8.8 percent over the same period. The above projections differ from the official estimates in that the latter assume the eventual enactment of such presidential proposals that the Congress has recently rejected, such as hospital cost containment, the withholding tax on interest and dividends, and a tax on gasoline and diesel fuel. I have adjusted the totals in the belief that the Congress will continue to ignore these proposals. The Congress is considering other budget cuts and revenue raising measures that may reduce the deficits slightly, but legislative action is far from complete and the final outcome is uncertain.

SOURCE: Office of Management and Budget, The Mid-Session Review of the 1981 Budget (Washington, D.C., July 21, 1980), table 1, p. 3, and table 25, p. 64, as adjusted by the author.

the congressional budget schedule calls for the passage of a second resolution by September 15.

I suspect that initially the discretionary additions to 1981 outlays will look somewhat different than the President's, but will not be much larger than the \$4.7 billion increase in program levels advocated by the President. (The President estimates that not all of this will be spent and the "stimulus" will reduce the net outlay impact to \$2.4 billion.) But as the year progresses we can expect a series of supplementals for surprises comparable to this year's refugee expenditures and outlays on natural disasters. Defense supplementals may also occur. Accepting the economic assumptions of table 1, I think it extremely modest to add \$10 billion to the 1981 July estimate of \$634.2 billion. With no tax cut, 1981 budget situation becomes:

|                       |              |         |
|-----------------------|--------------|---------|
|                       | <u>1981</u>  |         |
| Outlays               | \$644.2      | billion |
| Receipts              | <u>597.1</u> |         |
| Budget deficit        | 47.1         |         |
| Off-budget deficit    | <u>21.7</u>  |         |
| Financing requirement | \$ 68.8      |         |

It now appears as though the debate over a tax cut will carry over into next year, so that by the time one is passed and implemented less than four months will remain in the fiscal year. The revenue impact in 1981 will, therefore, be small, but will have to be confronted in subsequent years.

#### Budget Cuts?

Can the revenue loss be confronted by cutting spending? It will not be easy. Conservatives, such as Governor Reagan, want substantial cuts in non-defense programs, but they also believe that defense spending should be augmented. No candidate in this right mind will cut social security significantly and Reagan has explicitly promised to hold it harmless.

The most vulnerable part of the Carter projections involves a more than \$20 billion allowance for comprehensive health insurance in 1983 rising to over \$30 billion in 1985. If Reagan is elected, these amounts could be allocated to defense. If that is done and social security and the interest on the debt is subtracted from

the totals in table 1, the remaining budget grows from \$278.4 billion in 1981 to \$394.8 billion in 1985. Roughly one-half of this growth is absorbed by increases in programs that are difficult to reform, such as medicaid, medicare, civil service pensions, and other income security programs. The projections already assume that many other items in the budget are treated quite harshly. Functions such as "the administration of justice" and "general government" are cut drastically in real terms. "Veterans' benefits and services" are cut a bit in real terms even though a large portion of the huge cohort of World War II veterans will be retiring over the period.

Without going into detail, there are functions projected to spend about \$140 billion in 1985 or about 15 percent of the budget which some may judge to be more vulnerable to cuts depending on one's own political values and judgments as to the strength of the special interest supporting the programs. They include functions such as: international affairs (\$13.3 billion in 1985); general science, space and technology (\$7.1 billion); energy (\$12.7 billion); natural resources and environment (\$14.7 billion); agriculture (\$6.0 billion); commerce and housing credit (\$2.5 billion); transportation (\$25.9 billion); community and regional development (\$10.0 billion); education, training, employment, and social services (\$40.0 billion); and general purpose fiscal assistance (\$6.6 billion). Few of these are treated very generously by the projections, and it is my own judgment that they are more likely to be augmented than to be cut.

I believe that lowering the total spending path below the July projection will take actions by the Congress far more dramatic and politically courageous than anything experienced in past history. One should not rule out such actions, but because they have such low probability I would like to see them in place before advocating any tax cut at all in the 1981-1983 period. I reach this conclusion because I believe it important to strive for budget balance and because I put less stress on the efficiency gains from tax cuts than some of the more enthusiastic proponents of supply side economics. If large deficits are deemed acceptable or if one thinks that tax cuts would facilitate much more rapid growth than assumed by table 1, tax cuts become much less risky.

#### Tax Cuts and the Economic Assumptions

Table 1 does assume a very sick recovery from the trough of the recession and probably underestimates real GNP in this quarter. From 1980-1984 to 1981-

1984 the assumed growth is only 2.6 percent and real GNP is assumed to decline by about 4 percent at an annual rate in this quarter. A more vigorous recovery could significantly reduce my estimated 1981 financing requirements below the \$68.8 billion estimated earlier.

In the longer run, table 1 assumes real growth averaging 3.4 percent between calendar 1980 and calendar 1985. If one believes that a major tax cut such as Roth-Kemp would greatly enhance growth without adding to inflation, it becomes more reasonable. With the spending path and inflation assumed in table 1 and 4 percent annual real growth, the 1985 deficit becomes about \$85 billion or roughly 2 percent of GNP — the same level experienced in the 1977-1979 period. If, unlike me, one believes that the outlay path can be lowered, the savings might be used to enhance depreciation deductions.

If the annual real growth rate could be raised to the 5.4 percent experienced in the 1961-1966 period without increasing inflation, the 1985 budget would have a small surplus with table 1's spending path and current depreciation law. I find this an implausible scenario, but others may not.

In both scenarios with enhanced growth, deficits relative to GNP would be somewhat greater in the 1982-1984 period than in 1985, but admittedly not as high as recently experienced in countries like Japan and Canada. My own conclusion is that a major tax cut such as Roth-Kemp creates a large risk that I would rather avoid, but it is not as outlandish as some of its critics would have us believe. My own suggestion that there be no tax cut at all also creates a big risk. That is that the recovery from this recession will be even sicker than that assumed by the Administration.

### Postscript

Since the above was written, the congressional budget process has been proceeding on its glacial path through the Congress. The House-passed reconciliation bill reduces the savings previously passed by the Senate. The erosion of discipline is not yet serious, but is symptomatic of the difficulty of cutting the budget. Fewer than one-and-a-half million civil service and military annuitants were able to block (at least temporarily) the move to once-a-year indexing. Anyone want to take on 25 million medicare beneficiaries?

**SISYPHUS AND THE FED**

**by**

**Karl Brunner**

**University of Rochester**

**September 21-22, 1980**

**PPS-80-5**

**Statement prepared for the meeting of the Shadow Open Market Committee,  
September 21-22, 1980.**



## SISYPHUS AND THE FED

Sisyphus was condemned by the Gods, for good reason apparently, to eternal and hopeless labor. He was supposed to push a huge rock up hill which, at the edge of success, would inexorably slide back to the valley. Sisyphus may still be at work, for all we know, but the Gods seem to have changed their ways. They have provided us with the Federal Reserve and the more subtle torture of attempting to change the behavior of an important institution operated by an entrenched bureaucracy. We are of course not condemned by the Gods (or Fate, or Society) to push at the Fed rock. It remains our choice. But the Fed has condemned us to live under the economic conditions created by the increasingly inflationary policies insistently pursued over the past fifteen years. It has condemned us to hear the litany of excuses obfuscating the failure of policymaking. It also condemned us to watch a series of false or broken promises. Something is fundamentally wrong with the Fed's policymaking requiring at this stage some radical action.

### The Dreary Record

At the end of President Ford's Administration the inflation rate, measured in terms of the GNP deflator, had drifted below 5 percent p.a. A policy lowering monetary growth over the subsequent three to five years would have pushed the inflation rate to the vanishing point. The Congressional Resolution of March 1975, which recommended that the Fed's policymaking address monetary control, reenforced the potentially favorable condition for a final assault on inflation. But the Carter Administration abandoned this course and the Fed responded with verbal adjustments. The intent of the Resolution was simply dismissed. The Fed also disregarded the near unanimous recommendation advanced by the House Committee on Banking, Finance and Urban Affairs in February 1979. This recommendation followed very closely the proposals previously formulated by the Shadow Open Market Committee.

The failure in conception and political determination lengthened the series of broken anti-inflationary promises. The result became visible in 1978 with the surging inflation and the turmoil on the foreign exchange markets dominated by a

large decline of the dollar against leading currencies. The international repercussion of our government's financial failure eventually reached the White House. President Carter felt compelled to announce on October 24 a program promising, once more, to cope with inflation. The poor reaction to this announcement voted on the market places imposed the necessity of a supplementary program announced on November 1, 1978. These programs provided supportive interventions for the dollar on the exchange markets, offered prospects for better control over the Federal Budget, and contained the usual incantations about productivity and the efficient use of our resources. These incantations were largely irrelevant in the context of the Administration's dominant policy patterns and the fiscal promises were rapidly forgotten over the subsequent year. Most characteristic was however President Carter's failure to address the central issue of our inflation problem, viz. the Federal Reserve and its policymaking.

Federal Reserve policy continued in its ancient ways and proceeded with an erratic course. By late summer 1979 the foreign exchange markets signalled once more the newest failure. Chairman Volcker had meanwhile replaced a discredited Mr. Miller. The new Chairman offered to the political scene a personal credibility exceeding the low level of confidence granted to the institution by this stage. The consequences produced by the series of broken or irrelevant promises forced the new Chairman to announce publicly on October 6, 1979 a new policy. This announcement was particularly interesting as it really admitted the persistence of traditional policymaking geared to an interest rate targeting with, at most, incidental or marginal interest addressed to any form of effective monetary control. Chairman Volcker promised a "new game" in monetary policymaking to be implemented in terms of a control over the banks' volume of unborrowed reserves.

Several aspects of this event deserve our attention. We note first that the Federal Reserve Authorities refused to proceed with an obvious course. It could have announced that the recommendation made by the Banking and Currency Committee earlier in the year is fully and firmly accepted, and that the execution of the program will be guaranteed with suitable changes in policymaking procedures required for this purpose. The event evolved however very differently. The Chairman's announcement remained sufficiently unclear to encourage interpretative speculations. These speculations were fostered by comments and interpretations "helpfully" offered by Governors and other officials. The resulting uncertainty was clearly revealed by the capital markets. This uncertainty about the Fed persisted into the winter. The prevailing uncertainty was magnified by

President Carter at the end of January 1980 with the announcement of his "prudent and cautious budget". The budget proposed and the projections published discarded all previously made promises. They were "gone with the wind" of the Administration's political expediency. The Shadow Committee recognized the problem at its meeting last February and warned about an imminent "fiscal crisis". The Shadow also emphasized the inconsistencies between the assumptions made by the Treasury and the OMB for purposes of budget planning and the promises made by Chairman Volcker during the fall and winter. The impact of the increased uncertainty on the markets unleashed a run on the banks' asset side. There ensued frantic attempts by customers to activate credit lines or cover their positions against a credit crunch threatened by the government's policies. The turbulence on the credit markets with its repercussions for housing and banking compelled on March 14 another public performance by President Carter. Once more we suffered through the announcement of new promises and exhortations addressed to the inflation problem. The budget was mentioned, once more, with implicit admission of a prior failure in budgetary policies and a random selection of measures proposed. The President invoked also the Credit Control Act of 1969. But of course, we heard no program or commitment bearing on the future course of monetary policymaking. Some of the measures, most particularly those addressed to the budget, were certainly welcome for their own specific purposes. But the array of measures, whatever their respective merits for specific and mostly allocative purposes (i.e. who gets what at whose costs), remained essentially irrelevant and useless as an anti-inflationary program. My passage published after this event in Challenge Magazine may be quoted here: "The central fact which needs to be recognized is that President Carter's 'anti-inflation policies' exhibit the same sense of substantive irrelevance with respect to the inflation problem as all the preceding plans. It follows that we have no good reason—nor did we in the previous cases—to expect from President Carter's policies pursued over the next five years any relevant change in our inflationary reality. That really will be obscured, however, with intermittent bouts of anti-inflationary rhetoric."

Some comments need to be made here concerning credit controls. Many voices argued at the time that the Fed needed to apply such controls in order to contain a runaway credit expansion. The Fed could not stop such an expansion without this instrument. This is of course sheer nonsense. The total volume of bank credit and the money stock are jointly but differently determined by the same underlying factors. A crucial role among these inputs conditioning the behavior of

money stock and bank credit must be assigned to the monetary base. This magnitude is completely determined by the behavior of the Federal Reserve System irrespective of the Fed's conscious designs or unconscious drives. With a monetary base growing by not more than 5 percent p.a. "runaway credit expansion" is simply impossible. As a matter of fact, a persistent growth of even 10 percent p.a. in bank credit is most unlikely. The credit control measures had of course no relevant justification in terms of monetary policy or the required control of monetary growth. They were imposed under the pretense of an anti-inflationary device as a scheme designed to produce politically convenient wealth redistribution involving different types of financial intermediaries. But the credit control measures still exerted an effect on aggregate demand. They tended to produce a once and for all lowering of velocity by an uncertain margin. They also contributed to lower the money stock via the fall in the monetary multiplier. This reduction resulted from an increase in the currency ratio attributable to the relative shift in costs and yields between checking deposits and currency associated with the containment of the banks' credit card business. But the fact remains that the credit controls affected at the most the level of velocity and of the money stock, with hardly any effect on persistent monetary growth or the rate of credit expansion. The newest program involved thus, once more, an unnecessarily complex burden on the economy when evaluated in terms of the essential requirements of an anti-inflationary policy.

#### Disinformation and Dissemination of Uncertainty

The confused and essentially irrelevant responses to our protracted inflation problem may explain the confusing and uncertain course followed by the Federal Reserve as expressed by the evolution of monetary growth. Year over year monetary growth (M-1B) measures less than 6 percent p.a. for the period ending September 3, 1980. But this average was achieved in a most inauspicious and unreliable manner. A substantial retardation over three months in 1979 (September-November) was followed until February by a pronounced acceleration. This period was replaced by a massive decline of the money stock proceeding over three months at an annual rate exceeding somewhat 10 percent p.a. A turnaround with a massive expansion set in by the end of April. Monetary growth expanded from the end of April to early September at a pace of almost 12 percent p.a. and reached 16 percent p.a. over the past three months. The Federal Reserve

Authorities actively contributed to this development by raising the growth rate of the monetary base from about 8 1/2 percent p.a. a year over year to above 12 percent p.a. over the past three months and even 14 percent p.a. over the past two months. This record engenders, inspite of the year over year outcome, a pervasive uncertainty and a corrosive doubt. A sense of helpless bafflement confronts the managers on the creditmarket in their assessment of the expected course of Federal Reserve policy. High officials of the Federal Reserve Board assure us that we experienced since October 6, 1979 a successful execution of monetary policy. The growth rate was indeed inside the target band. But the evolution behind the annual average gives no assurance that the Fed knows its business or really cares to know the business of controlling monetary growth. The average growth rate over twelve months obscures the real problem associated with the disinformation supplies and uncertainty produced by the actual evolution of our monetary affairs. We are also told moreover that even major variations of monetary growth over two quarters or so do not really matter. Accelerations (or decelerations) of the money stock must persist, in this view, substantially beyond two quarters before significantly influencing output and employment. This reasoning misses however a crucial aspect of substantial importance for an effective anti-inflationary program. The responsiveness of price-wage setting to modifications in monetary policy depend decisively on the public's perception of this event. The price movement will respond quite negligibly to any declaration of anti-inflationary policy whenever the public interprets the event, on the basis of past experience, as a transitory aberration from a permanent pattern of inflationary policies. The credibility of Federal Reserve policy thus determines crucially the responsiveness of the inflation rate and the social cost of an anti-inflationary policy. The lower this credibility, the lower falls the responsiveness of prices and the larger looms the social cost of disinflation. But the large variations in the performance so easily dismissed by high officials, further erode whatever level of credibility is left for the institution and also affects the credit initially extended to the new Chairman. This performance contributes to lengthen the unhappy period required for any substantial downward drift in the inflation rate. The public requires under the circumstances a much longer period of actually demonstrated anti-inflationary behavior before adjusting its price-wage setting patterns. This uncertainty was further strengthened by the Fed's unfortunate refusal to announce targets at the Congressional Hearings held this summer. The Fed argued that institutional modifications recently legislated made it difficult to assess the ensuing monetary growth. We need not comment

here on the interesting aspect of the refusal to comply with a law addressed by Congress to the Federal Reserve Authorities. The revealing feature for our purposes is the nature of the evasion or of the excuse offered. The new legislation does indeed produce some uncertainty about the response patterns to be expected. They may induce shifting patterns modifying the monetary multiplier to a new level. But is it really beyond the Fed's capacity to assess the direction of these shifts? Any competent economist who has worked on these issues could produce some rational basis for policy evaluation. These are exactly the problems the Federal Reserve staff should examine. We would not need for this purpose any detailed quantitative estimates. An assessment of the direction with an estimate of the broad orders of magnitude in the light of prior experiences of financial innovation would suffice. It would suffice in particular for a provisional target setting combined with the recognition, articulated at this stage in order to avoid subsequent confusions, that revisions should be expected over the initial quarters of next year. The Authorities could also acknowledge that in the context of this temporary uncertainty particular attention should be assigned, for the moment, to the monetary base. It could assure us in this manner that the growth rate of the base will be lowered below the recent acceleration and held below 3 percent p.a. and more nearly to 6 percent p.a. over the next three quarters. We note moreover in passing that the contradiction between the admirable statements about the inflation problem made by the Chairman on repeated occasions during the past winter and some suggestive statements made in this matter by a new Governor hardly encourage greater confidence in the Fed.

The dissemination of uncertainty fostered by the behavior and events summarized above are reenforced by the disinformation supplied by the staff and officials. Such disinformation emerged this summer with the argument that the unreliable monetary evolution observed over the past twelve months was imposed by the behavior of money demand. This pronouncement was amplified by a recent statement of an official to the effect that "there really was no money demand". These statements renew an old and favorite theme of the Federal Reserve Authorities. It is a theme which has effectively confused the media and usefully absolves the Fed from any responsibility. But we need to recognize these arguments for what they are: They involve a rational cover-up for an essentially irresponsible policy which brought us over the past fifteen years to the present state.

The so-called demand-control of monetary growth presupposes that the Fed pursue an interest targeting policy. Disturbances in money demand are converted under the circumstances into accommodative adjustments in monetary growth. It would follow therefore that attribution of monetary gyrations over the past twelve months to demand-induced adjustments contradicts the promise made by Chairman Volcker in his announcement of October 6, 1979. Either the Fed has moved to a control of monetary growth exercised by targeting bank reserves or it continues the tradition of interest targeting. But it cannot have it both ways and it makes no sense to speak of a demand-controlled behavior of monetary growth under the Chairman's announced new procedure. Or should we infer that the Chairman's announcements never penetrated to the level at which policies are executed and implemented? Or should we infer that the gyrations expressed shifting random combinations of old and new procedure? But this is not all. Once a Central Bank sets a course implemented with a targeting of interest rates it establishes a mechanism which transforms all disturbances occurring all over the economic system into accommodative variations of monetary growth. A (negative) disturbance of aggregate demand for output is converted by an interest policy into a decline of monetary growth. Analogously, disturbances in the demand and supply of financial markets well beyond money demand are also converted by such a policy into monetary adjustments. There is consequently simply no basis to jump to the conclusion of a monetary growth determined by the vagaries of the public's money demand, even in the context of an interest target policy.

The second assertion is even more blatantly dubious. It requires also some interpretation. Literally understood it is so obviously false that it hardly merits discussion, if it were not for the impressionistic impact apparently enjoyed by such sweeping statements on the media market. But we do observe that people still hold money balances and do not rush into a "hot potato game" attempting to unload all this green stuff. Alternatively, it could mean that money demand is thoroughly and unpredictably volatile submerging all possible aspects of systematic behavior. This view reflects an ancient heritage of the Federal Reserve's traditional conception. This conception was highly myopic and geared to the shortest or short-run horizons. Over a day or a week, or even a month, the white noise of unpredictable innovations tends to dominate most systematic patterns, both on output and money market. A myopic vision cultivated in accordance with the Federal Reserve's oldest tradition fails to recognize the underlying patterns of pervasively systematic behavior emerging beyond the volatile noise of the immediate events. Attention to

this noise blurs the policymaking responsible for the experiences of the past fifteen years. This attention, ornamented with a variety of judicious comments about a complex world, orderly markets and the need for well adjusted, finely tuned or activist exercises, offers useful opportunities for shifting accommodations.

### What's To Be Done

The present state is not an accident and inflation was not imposed by angry Gods (or an evil Society). It was produced by the Federal Reserve Authorities. They have aggravated the problem over time and launched us on a new round in 1976. It is still doubtful at this point in time that the staff has learned its lesson. The homework necessary for an effective monetary control has been neglected so far. The announcement of October 6, 1979 remains under the circumstances a hopeful promise. But the staff seems simply unwilling or incompetent to develop the monetary controls required for an effective anti-inflationary program corresponding to the Chairman's well expressed intentions. The ingredients of such a program have been described on repeated occasions in previous position papers prepared for the Shadow Open Market Committee.

The first requirement involves some attention to the institutions facilitating monetary control. This bears in particular on the operation of the discount window, the specification of the reserve requirement and the conditions regulating the supply of intermediary liabilities.

More important in the USA is a requirement bearing on the implementation of policy. Our proposal involves a definite procedure which translates the targeted monetary path into a required path for the monetary base. This path immediately determines on the basis of weekly available information about the movement in the sources item of the base the net open market purchases required for any given period of time. The statistical studies carried out in depth by one of our members (Professor Robert Rasche with his colleague James Johannes) demonstrates the feasibility of the control technique. It also shows that it would operate more reliably than the bank reserve technique proposed by the Fed. Our proposals are well known to the Fed's staff and the feasibility study prepared by our members has been published. A follow-up study has been made available to the staff. The record of the Swiss National Bank, based on a very similar procedure, is also known and available. But the Federal Reserve's bureaucracy determinedly refuses to acknowledge anything beyond its confused tradition and practices. There is now,

after fifteen years, no excuse for such self-serving behavior of an interested bureaucracy. If the present staff is too incompetent or too unwilling to serve the long-run interests of this country so forthrightly formulated on many occasions by the Chairman it is time to replace it with a crew who can and will.



# THE CONSTRUCTION AND FORECASTING OF MONEY MULTIPLIERS FOR THE NEW MONETARY AGGREGATES

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## I. Conceptual Problems in Constructing Multipliers for the new Monetary Aggregates

At first glance, it appears that conceptually the multipliers for the newly defined monetary aggregates should be the same as for the old concepts, with the exception of minor changes in some of the components as a result of the differences in definitions. A more careful consideration of the problem reveals that while the formulas for the appropriate multipliers for the new concepts can be made to look the same as those for the old concepts, considerable differences are hidden within the component definitions.

The first problem arises because of the philosophy embodied in the new definitions that similar assets should be aggregated regardless of the legal form of organization of the financial intermediary that offers them to the public (see Federal Reserve Bulletin, February, 1980, p. 100). This creates an asymmetry between the component ratios required for the numerator of the multipliers and the ratios required for the denominator of the multipliers. The asymmetry arises because, depending on the legal form of organization of the financial intermediary, base absorbing reserves held or required against similar liabilities will differ. The same problem was encountered in the old definitions of the monetary aggregates with respect to member and nonmember banks, and with respect to different legal reserve requirements for different classes of member banks. The reserve ratio, as defined for the old aggregates was a weighted average of the reserve ratios of these different classes of banks, and thus conceptually is subject to random variation because of unpredictable shifts of liabilities among these banks. In fact, this did not seem to be much of an empirical problem in forecasting multipliers for the old aggregate definitions.

For  $M_{1-B}$  a multiplier can be defined that is analogous to the old  $M_1$  multiplier. Let

D = Total checkable deposits at all Intermediaries (which are becoming subject to Federal Reserve Requirements under the Depository Institutions Deregulation and Monetary Control Act of 1980)

C = Currency component of  $M_{1-B}$

$T_1$  = Time deposits at commercial banks except large time deposits

$T_2$  = Large time deposits at commercial banks

G = Treasury deposits at commercial banks

R = Total reserves at Federal Reserve Banks plus bank vault cash

Z = Deposits of foreign commercial banks and official institutions at commercial banks

and define the following ratios:

$$k = C/D$$

$$t_1 = T_1/D$$

$$t_2 = T_2/D$$

$$g = G/D$$

$$z = Z/D$$

$$r = \left( \frac{R}{D + T_1 + T_2 + G + Z} \right)$$

then

$$M_{1-B} = \left[ \frac{1 + k}{r(1 + t_1 + t_2 + g + z) + k} \right] B$$

where B = the source base (deposits at the Federal Reserve Banks plus currency in circulation).

r as defined here is a weighted average reserve requirement on deposit liabilities of commercial banks and transaction accounts at non-bank institutions.

The asymmetry problem arises in going to broader monetary aggregates such as  $M_2$  or  $M_3$ .  $M_2 \equiv C + D + T_1 + T_3$  where  $T_3$  equals the components of  $M_2$  that are not reserve absorbing liabilities of commercial banks, either because they are not liabilities of commercial banks or because they are not liabilities subject to reserve requirements.  $T_3$  includes savings deposits and small denomination time deposits at Savings and Loans, Mutual Savings Banks and Credit Unions, as well as money market mutual funds, Overnight (net) RP's and Overnight Eurodollars and is net of the consolidation item that is discussed below. Similarly,  $M_3 \equiv M_2 + T_2 + T_4$  where  $T_4$  includes term RP's at commercial banks and thrifts as well as large denomination time deposits at thrifts.

One approach to the problem would be to treat the new  $M_2$  and  $M_3$  multipliers analogously to our previous treatment of the old  $M_3$  and  $M_5$  multipliers. That would involve defining additional ratios

$$t_3 = T_3/D$$

$$\text{and } t_4 = T_4/D$$

with the resulting expressions for  $M_2$  and  $M_3$ .

$$M_2 = \left[ \frac{1 + k + t_1 + t_2}{r(1 + t_1 + t_2 + g + z) + k} \right] B$$

and

$$M_3 = \left[ \frac{1 + k + t_1 + t_2 + t_3 + t_4}{r(1 + t_1 + t_2 + g + z) + k} \right] B$$

In practice, defining such components may work, but it would appear to violate the spirit and implicit assumption in the construction of the new aggregates that similar liabilities at institutions with different legal form of organization are perfect (or close to perfect) substitutes. If this is not the case now, it is likely to be so in the future as interest rate ceilings are phased out of existence. If such assumptions are correct, then it should be possible to estimate better time series models for  $(t_1 + t_3)$  and  $(t_2 + t_4)$  than for the individual ratios.

Taking this alternative approach, and defining:

$$t_1^* = (t_1 + t_3)$$

$$t_2^* = (t_2 + t_4)$$

the appropriate multiplier formulae are:

$$M_{1-B} = \left[ \frac{1 + k}{\bar{r}(1 + t_1^* + t_2^* + g + z) + k} \right] B$$

$$M_2 = \left[ \frac{1 + k + t_2^*}{\bar{r}(1 + t_1^* + t_2^* + g + z) + k} \right] B$$

$$M_3 = \left[ \frac{1 + k + t_1^* + t_2^*}{\bar{r}(1 + t_1^* + t_2^* + g + z) + k} \right] B$$

where  $\bar{r} = \frac{R}{D + T_1 + T_2 + T_3 + T_4 + G + Z}$

The problem now is constructing a stable time series model for  $\bar{r}$ , in that when similar component ratios are used in both the numerator and denominator of the  $M_2$  and  $M_3$  multipliers, the implied reserve ratio ( $\bar{r}$ ) is not only weighted average of reserve ratios for different classes of banks, but also for different types of intermediaries. For some of these intermediaries, the base absorbing effective reserve ratios may be close to zero. Consequently the residual variability of the reserve ratio is potentially considerably amplified because of shifts in liabilities among such institutions or could be rendered unstable because of differential growth rate among institutions.

A second problem is posed by the consolidation procedures used in constructing the new monetary aggregates (see Federal Reserve Bulletin, February, 1980, p. 98). In defining the broader aggregates, the Fed has chosen to consolidate balance sheets across institutions to avoid double counting of demand deposits. This affects only the ratio  $t_1^*$  as defined above. For purposes of the numerator of the multiplier expressions,  $t_1^*$  is and should be defined on a net basis. On the other hand, for reserve purposes, it is gross deposits that are relevant, not the consolidated net deposits. Therefore, for purposes of the denominator of the multiplier,  $t_1^*$  should be defined on a gross deposit basis. In principle then separate  $t_1$  models are required for both the numerator and the denominator. In practice, the consolidation component is very small at present and we have used the same  $t_1^*$  model for both the numerator and the denominator. Thus the implicit reserve ratio for checkable deposits at commercial banks in the  $r$  ratio is the weighted average reserve requirement for such deposits multiplied by the ratio of gross checkable deposits at commercial banks to consolidated net checkable deposits at commercial banks.

A third problem is caused by the revision of the money stock definitions to exclude demand deposits held at domestic commercial banks by foreign commercial banks and foreign official institutions. This revision is consistent with the recommendations of the Bach committee, and reverses the troublesome redefinition in 1962 that included all domestically held demand deposits of foreign official institutions, including those held at Federal Reserve Banks. Unfortunately for the purposes of forecasting money multipliers, such deposits remain subject to Federal Reserve requirements, at least so far as member banks are concerned. Therefore, they are analogous to U.S. Treasury deposits at commercial banks, in that they are base absorbing, but are excluded from the money stock definitions.

Consequently, component ratio, which we have designated  $z$ , now appears in the denominator of multipliers for all the money stock definitions.

## II. Forecasting the Multipliers: Time-Series Component Models

For our first attempt at reformulating our component models, we have implemented the  $t_1^*$  and  $t_2^*$  definitions above. This approach has the virtue of being the simplest to operationalize, and while it may cost some forecasting efficiency, if it is found to perform comparable to our models for the old money stock definitions, the benefits from the more precise formulations are probably not worth the costs.

The models for all of the components of the  $M_{1-B}$  through  $M_3$  money stock multipliers are given in table I for the St. Louis Bank definitions of the monetary base and adjusted bank reserves. The models displayed in table I have been estimated through December, 1978 but it is worth noting that truncating the sample at March, 1978 (the last month used in the estimation of our old models) has little effect on the estimated parameters. There is a remarkable similarity in the structure of the new models to those for the old money stock definitions. Indeed, in some cases, the structure of the new models is simpler than that for the corresponding components under the old definitions.

We have examined the stability of the models for sample periods ending at various points in 1978 and 1979. In the models that we have developed for the old money stock definitions, we introduced an intervention term (dummy variable) that allowed for the development of ATS accounts in late 1978. The assumption implicit in that intervention term was that all ATS balances came from substitution out of demand deposits. Since the denominator of the new models includes both demand deposits and ATS balances, under our former assumption, the models in table I should remain stable as the sample period is extended through 1979. We have found no evidence to suggest that this assumption is inappropriate, and consequently have used the models estimated through 1978.12 for all of our subsequent forecasts. Our motivation for not using longer samples in our estimation is to avoid data that have not fully incorporated benchmark revisions associated with call reports.

It is particularly noteworthy that the concerns expressed above about the reserve ratio multiplier appear to be unwarranted. The standard error of estimate for the  $(r + .1)$  model based on deposits aggregated across the various financial institutions is actually smaller in percentage terms than the standard error of

estimate for the reserve ratio under the old money stock definitions. Since the reserve ratio under the new definitions is a smaller number than the reserve ratio under the old definitions, the actual errors in forecasting the reserve ratio should be considerably reduced.

A casual examination of the errors in the various components suggests that forecasting record of these models for the new money stock definitions should be comparable to that which was achieved by our old models. Some specific forecasting results, including our current set of forecasts are discussed below.

### III. Forecasting Performance of the Models

We have used the models displayed in table I to forecast the multipliers for the new  $M_{1-B}$ ,  $M_2$  and  $M_3$  monetary aggregates. Forecasts were generated from several base periods spanning the period December, 1978 to June, 1980. The forecasting performance of our models over the period January, 1979 to March, 1980 is as suggested above, quite good, and is consistent with the forecasting ability of our earlier models based on the old monetary aggregates. The accuracy of the models over this period is indicated by the actual and forecasted net monetary base multipliers for January through March, 1980 displayed in table II. The errors in forecasting the  $M_{1-B}$  multipliers are on the order of one-half percent, as are the errors in forecasting the  $M_2$  and  $M_3$  multipliers.

The forecasting error for April, 1980 departs from what is expected given the past performance of the models and our old models in that the error is much larger, on the order of two percent. The problem, however, is one of levels not changes. This is seen by an examination of the forecasts for 1980. Consider  $M_{1B}$ . The multiplier forecasts of our models are too high over the period of April to May, 1980. Subsequently, they are quite good, as the April-May experience is incorporated into the data. In spite of this level problem the models predict changes rather well. For example, the March forecasts predict the  $M_{1B}$  multiplier will fall by about 3 percent between April and May, and then rise by 1 percent between May and June. The multiplier actually fell by 4 percent between April and May, and rose by 1 percent between May and June. The forecasts for the changes between June and July are a little worse, but that may be because the July data is only preliminary. The fact that the models predict changes rather well should not be surprising because, after all, the models are really models of log first differences, or growth rates of the components.

The April experience is, nevertheless, atypical of the historical forecasting ability of our models and, therefore, deserves special attention. The models predicted that the  $M_{1B}$  multiplier would rise considerably between March and April, the  $M_2$  multiplier would rise somewhat, and that the  $M_3$  multiplier would remain constant. In actuality, the  $M_{1B}$  multiplier remained relatively constant and the  $M_2$  and  $M_3$  multipliers fell considerably. As a result, the forecasted multipliers were all too high.

A Taylor expansion (through the linear terms) of the error in forecasting the  $M_{1B}$  multiplier sheds some light on why the models failed to forecast April;

$$\begin{aligned}
 (\ln m_{1B}^p - \ln m_{1B}^a) = & E(m, k) \left[ \ln k^p - \ln k^a \right] \\
 & + E(m, r+1) \left[ \ln(r+1)^p - \ln(r+1)^a \right] \\
 & + E(m, t_1^*) \left[ \ln t_1^{*p} - \ln t_1^{*a} \right] \\
 & + E(m, t_2^*) \left[ \ln t_2^{*p} - \ln t_2^{*a} \right] \\
 & + E(m, g) \left[ \ln g^p - \ln g^a \right] \\
 & + E(m, z) \left[ \ln z^p - \ln z^a \right] \\
 & + E(m, b) \left[ \ln b^p - \ln b^a \right] + R
 \end{aligned} \tag{1}$$

Where  $E$  denotes elasticity,  $p$  predicted and  $a$  actual, and where small  $m$ 's denote multipliers. Evaluating the right hand side of (1) at the actual values of the ratios reveals that the total error in predicting the  $M_{1B}$  multiplier of .02054 can be attributed to errors in forecasting the components as follows:

| Component | Contribution to Total Error<br>(Elasticity Weighted Component<br>Forecast Error) | Percent of<br>Total Error |
|-----------|----------------------------------------------------------------------------------|---------------------------|
| k         | .00903                                                                           | 44.0                      |
| r+1       | .00341                                                                           | 16.6                      |
| $t_1^*$   | .00404                                                                           | 19.7                      |
| $t_2^*$   | .00114                                                                           | 5.6                       |
| g         | .00027                                                                           | 1.3                       |
| z         | .00012                                                                           | .6                        |
| b         | .00240                                                                           | 11.7                      |

Clearly, although the error in forecasting the currency ratio contributed the largest amount to the overprediction of the multiplier, errors in forecasting all the components (with the possible exception of  $g$  and  $z$ ) contributed somewhat to the error in forecasting the multiplier.

One explanation of this result is the unusual behavior of interest rates in April (and May). As the accompanying graph illustrates, interest rates fell dramatically over this period. Certain rates halved and others fell by a third! If the money supply is at all sensitive to interest rates such a profound decrease in interest rates should be expected to have some effect on the money multiplier regardless of how small the interest elasticity of the multiplier. Consequently, our models, which assume zero interest elasticity, would naturally over predict the multiplier at a time when interest rates are dropping precipitously as was the case in April. This episode, however, is not symptomatic of a major weakness of our models. The fact that the multiplier forecast errors were only about one to one-and-a-half percent larger than normal in April is testimony to the very low interest elasticity of the money supply.

Table I Component Models

|         |                                                                                                                                                                                                                                                                                                  |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| k       | $(1-B) (1-B^3) (1-B^{12}) \ln k = (1-.70581B^3) (1-.66907B^{12})a$<br>$\chi^2 = 37.8 \text{ df} = 28 \text{ S.E.E. } .556 \times 10^{-2} \text{ SAMPLE } 59.1-78.12$                                                                                                                             |
| g       | $(1-B) (1-B^{12}) \ln g = (1-.38067B) (1-.21252B^2) (1-.50131B^{12})a$<br>$(.0675) \quad (.0734) \quad (.0632)$<br>$\chi^2 = 31.6 \text{ df} = 27 \text{ S.E.E. } .181 \text{ SAMPLE } 59.1-78.12$                                                                                               |
| z       | $(1-.36188B) (1-B) (1-B^{12}) \ln z = (1-.69992B^{12})a$<br>$(.0640) \quad (.0501)$<br>$\chi^2 = 36.5 \text{ df} = 28 \text{ S.E.E. } .273 \times 10^{-1} \text{ SAMPLE } 59.1-78.12$                                                                                                            |
| $t_1^*$ | $(1-B) (1-B^3) (1-B^{12}) \ln t_1^* = (1-.64701B^3) (1-.61528B^{12})a$<br>$(.0531) \quad (.0587)$<br>$\chi^2 = 29.9 \text{ df} = 28 \text{ S.E.E. } .549 \times 10^{-2} \text{ SAMPLE } 59.1-78.12$                                                                                              |
| $t_2^*$ | $(1-B^{12}) \left[ (1-B) \ln t_2^* + .00224D_1^a + .4750D_2 - .08269D_3 \right]$<br>$(.0186) \quad (.0133) \quad (.0168)$<br>$= (1-.53840B)^{-1} (1-.65984B^{12})a$<br>$(.0617) \quad (.0565)$<br>$\chi^2 = 31.0 \text{ df} = 28 \text{ S.E.E. } .298 \times 10^{-1} \text{ SAMPLE } 61.1-78.12$ |
| r+1     | $(1-B) (1-B^{12}) \ln (r+1) = (1-.61654B + .21149B^2 - .41122B^{12})a$<br>$(.0887) \quad (.0885) \quad (.0757)$<br>$\chi^2 = 31.0 \text{ df} = 27 \text{ S.E.E. } .887 \times 10^{-2} \text{ SAMPLE } 68.10-78.12$                                                                               |
| r+1-v   | $(1-B) (1-B^{12}) \ln (r+1-v) = (1-.23795B - .51541B^{12})a$<br>$(.0841) \quad (.0891)$<br>$\chi^2 = 21.4 \text{ df} = 28 \text{ S.E.E. } .704 \times 10^{-2} \text{ SAMPLE } 68.10-78.12$                                                                                                       |
| b       | $(1-B) \ln b = a$<br>$\chi^2 = 35.6 \text{ df} = 30 \text{ S.E.E. } .460 \text{ SAMPLE } 68.10-78.12$                                                                                                                                                                                            |

a  $D_1$  is a dummy for the period 1966.7 to 1966.12,  $D_2$  is a dummy for the period 1968.12 to 1970.6 and  $D_3$  is a dummy for the periods 1967.1-2 and 1970.7-8.

Table II: Actual and Forecasted Values of Money Multipliers, NSA

1980

|                   | Jan      | Feb      | Mar      | Apr      | May      | June     | July     | Aug      | Sep      | Oct      |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| M1NMB Actual      | 2.52386  | 2.51418  | 2.52579  | 2.53169  | 2.43694  | 2.45944  | 2.46376  |          |          |          |
| fcst 12/79 Origin | 2.53681  | 2.49887  | 2.51184  | 2.57066  |          |          |          |          |          |          |
| fcst 1/80 Origin  |          | 2.48431  | 2.49754  | 2.55234  | 2.47642  |          |          |          |          |          |
| fcst 2/80 Origin  |          |          | 2.52284  | 2.58037  | 2.50807  | 2.54101  |          |          |          |          |
| fcst 3/80 Origin  |          |          |          | 2.58424  | 2.51130  | 2.53993  | 2.53448  |          |          |          |
| fcst 4/80 Origin  |          |          |          |          | 2.46416  | 2.48966  | 2.47378  | 2.46082  |          |          |
| fcst 5/80 Origin  |          |          |          |          |          | 2.45809  | 2.44466  | 2.42736  | 2.44098  |          |
| fcst 6/80 Origin  |          |          |          |          |          |          | 2.44528  | 2.42921  | 2.44468  | 2.43200  |
| M2NMB Actual      | 9.87830  | 10.09741 | 10.18730 | 10.11638 | 9.98731  | 10.01130 | 10.02469 |          |          |          |
| fcst 12/79 Origin | 9.90652  | 10.05836 | 10.12475 | 10.14461 |          |          |          |          |          |          |
| fcst 1/80 Origin  |          | 10.02207 | 10.08959 | 10.10403 | 10.00381 |          |          |          |          |          |
| fcst 2/80 Origin  |          |          | 10.14643 | 10.16928 | 10.06958 | 10.09611 |          |          |          |          |
| fcst 3/80 Origin  |          |          |          | 10.21392 | 10.11118 | 10.13212 | 10.06194 |          |          |          |
| fcst 4/80 Origin  |          |          |          |          | 10.02996 | 10.04035 | 9.96915  | 9.97925  |          |          |
| fcst 5/80 Origin  |          |          |          |          |          | 9.98110  | 9.91936  | 9.93613  | 9.96787  |          |
| fcst 6/80 Origin  |          |          |          |          |          |          | 9.94650  | 9.96861  | 10.01594 | 9.97991  |
| M3NMB Actual      | 11.51184 | 11.79125 | 11.88825 | 11.79941 | 11.65827 | 11.62568 | 11.58993 |          |          |          |
| fcst 12/79 Origin | 11.54378 | 11.72895 | 11.80969 | 11.81467 |          |          |          |          |          |          |
| fcst 1/80 Origin  |          | 11.69201 | 11.77654 | 11.77399 | 11.68699 |          |          |          |          |          |
| fcst 2/80 Origin  |          |          | 11.85374 | 11.86039 | 11.77856 | 11.79345 |          |          |          |          |
| fcst 3/80 Origin  |          |          |          | 11.89760 | 11.81117 | 11.81574 | 11.74456 |          |          |          |
| fcst 4/80 Origin  |          |          |          |          | 11.75572 | 11.76072 | 11.68514 | 11.74781 |          |          |
| fcst 5/80 Origin  |          |          |          |          |          | 11.62768 | 11.55447 | 11.61199 | 11.66842 |          |
| fcst 6/80 Origin  |          |          |          |          |          |          | 11.53041 | 11.58258 | 11.65009 | 11.60965 |

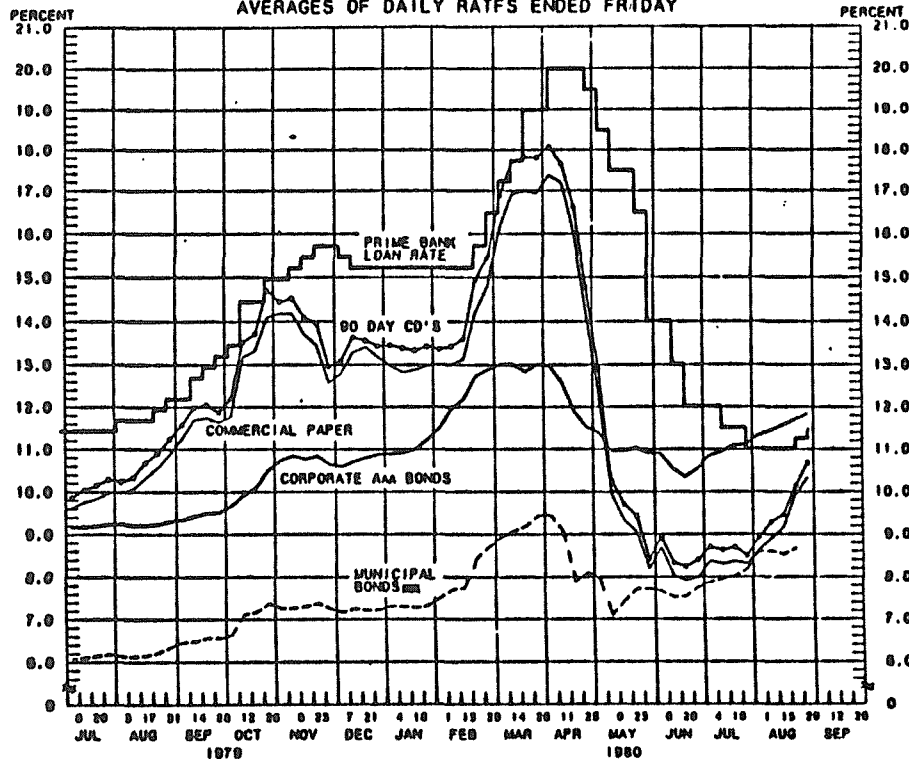
Quarterly Geometric Average

1980

|      | I <sup>(a)</sup> | II <sup>(a)</sup> | III     | IV      | I       | II      |
|------|------------------|-------------------|---------|---------|---------|---------|
| M1-R | 2.5213           | 2.4757            | 2.4398  | 2.4289  | 2.3910  | 2.3735  |
| M2   | 10.0335          | 10.0382           | 9.9770  | 9.8954  | 10.0254 | 10.0825 |
| M3   | 11.7294          | 11.6942           | 11.5876 | 11.5310 | 11.6932 | 11.7406 |

## YIELDS ON SELECTED SECURITIES

### AVERAGES OF DAILY RATES ENDED FRIDAY



LATEST DATA PLOTTED ARE AVERAGES OF RATES AVAILABLE FOR THE WEEK ENDING, AUGUST 20, 1980

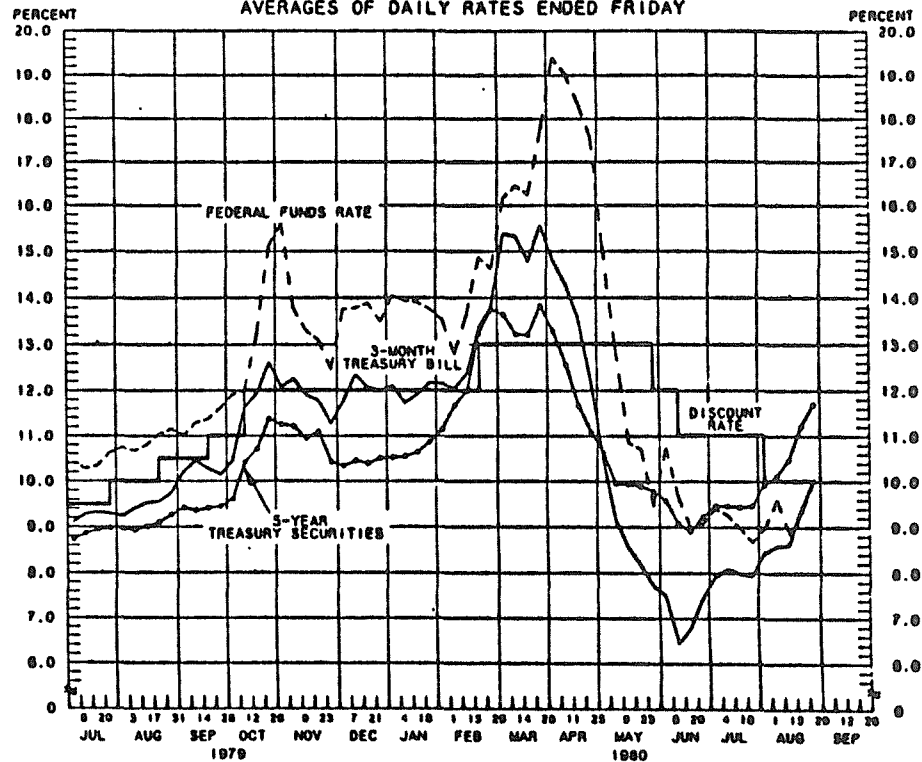
| 1980  | 90 DAY CD'S | PRIME COMMERCIAL PAPER | PRIME BANKERS' ACCEPTANCES | CORPORATE AAA BONDS | CORPORATE BAA BONDS | MUNICIPAL BONDS |
|-------|-------------|------------------------|----------------------------|---------------------|---------------------|-----------------|
| JUL 4 | 8.70        | 8.38                   | 8.66                       | 10.84               | 12.68               | 7.88            |
| 11    | 8.63        | 8.31                   | 8.58                       | 10.94               | 12.61               | 7.95            |
| 18    | 8.70        | 8.37                   | 8.55                       | 11.09               | 12.66               | 8.03            |
| 25    | 8.50        | 8.31                   | 8.44                       | 11.11               | 12.65               | 8.19            |
| AUG 1 | 8.93        | 8.64                   | 8.87                       | 11.33               | 12.70               | 8.59            |
| 8     | 9.29        | 8.80                   | 9.14                       | 11.44               | 12.97               | 8.61            |
| 15    | 9.46        | 9.16                   | 9.39                       | 11.57               | 13.07               | 8.53            |
| 22    | 10.13       | 9.93                   | 10.14                      | 11.70               | 13.29               | 8.68            |
| 29    | 10.68       | 10.34                  | 10.69                      | 11.83               | 13.31               | N.A.            |
| SEP 5 |             |                        |                            |                     |                     |                 |
| 12    |             |                        |                            |                     |                     |                 |
| 19    |             |                        |                            |                     |                     |                 |
| 26    |             |                        |                            |                     |                     |                 |

■ AVERAGES OF RATES AVAILABLE.  
■ BOND BUYER'S AVERAGE INDEX OF 20 MUNICIPAL BONDS, THURSDAY DATA.  
■ DATA ARE 4-MONTH COMMERCIAL PAPER RATES.  
N.A. - NOT AVAILABLE

PREPARED BY FEDERAL RESERVE BANK OF ST. LOUIS

## SELECTED INTEREST RATES

### AVERAGES OF DAILY RATES ENDED FRIDAY



LATEST DATA PLOTTED ARE AVERAGES OF RATES AVAILABLE FOR THE WEEK ENDING, AUGUST 20, 1980

| 1980  | FEDERAL FUNDS | 3-MONTH TREASURY BILL | 6-MONTH TREASURY BILL | 1-YEAR TREASURY BILL | 3-YEAR TREASURY SECURITIES | LONG-TERM TREASURY SECURITIES |
|-------|---------------|-----------------------|-----------------------|----------------------|----------------------------|-------------------------------|
| JUL 4 | 9.41          | 7.92                  | 8.10                  | 7.86                 | 9.47                       | 10.05                         |
| 11    | 9.26          | 8.08                  | 8.11                  | 7.91                 | 9.46                       | 10.13                         |
| 18    | 8.98          | 7.98                  | 8.11                  | 7.93                 | 9.44                       | 10.16                         |
| 25    | 8.68          | 7.93                  | 7.91                  | 7.94                 | 9.46                       | 10.17                         |
| AUG 1 | 8.98          | 8.44                  | 8.28                  | 8.43                 | 9.92                       | 10.51                         |
| 8     | 9.60          | 8.58                  | 8.67                  | 8.61                 | 10.12                      | 10.65                         |
| 15    | 8.85          | 8.60                  | 8.69                  | 8.94                 | 10.47                      | 10.86                         |
| 22    | 9.35          | 9.41                  | 9.77                  | 9.85                 | 11.21                      | 11.02                         |
| 29    | 10.03         | 10.03                 | 10.25                 | 10.31                | 11.70                      | 11.14                         |
| SEP 5 |               |                       |                       |                      |                            |                               |
| 12    |               |                       |                       |                      |                            |                               |
| 19    |               |                       |                       |                      |                            |                               |
| 26    |               |                       |                       |                      |                            |                               |

■ AVERAGES OF RATES AVAILABLE.  
■ SEVEN-DAY AVERAGES FOR WEEK ENDING WEDNESDAY TWO DAYS EARLIER THAN DATE SHOWN.  
■ CURRENT DATA APPEAR IN THE BOARD OF GOVERNORS' N.B. RELEASE.  
■ NEW ISSUE RATE.  
RATES ON LONG-TERM TREASURY SECURITIES ARE COMPUTED BY THE FEDERAL RESERVE BANK OF ST. LOUIS.  
TREASURY BILL YIELDS ON DISCOUNT BASIS.

PREPARED BY FEDERAL RESERVE BANK OF ST. LOUIS

## COMMENTARY ON MONETARY POLICY FOR THE PAST YEAR

Homer Jones

Federal Reserve Bank of St. Louis (Retired)

The Federal Reserve has had an objective of increasing the money stock (M1B) since late 1979 at a rate between 4 and 6 1/2 percent per annum (mid-range 5 1/4 percent). This has been in contrast with an average rate of 7 1/2 percent per annum over the preceding four years. This objective was well designed to start a path of reduction in the growth of money which would in time reduce the rate of price inflation in the economy. In actual fact M1B did increase at a 6.2 percent rate from last November to the latest four week period ending August 27. Exception can be taken to the actual Federal Reserve procedure only on the grounds that it has been so erratic since last November. Money was increased at a 7.6 percent rate from November to February, decreased at a 5 percent rate from February to May and increased at a 17 percent rate from May to August. This procedure gave an impression that the Fed during November-February was not following the policy procedure announced October 6, 1979, to reduce the rate of growth of money at all. The February-May procedure seemed to indicate that the Fed had suddenly become extremely tight and indeed would seem to have contributed to the onslaught of the sharp economic recession. The subsequent very sharp money growth may be looked upon as a necessary offset to the February-May decline, but it left the public confused as to whether the Fed had abandoned the October 6th policy and as to whether the rate of growth of money was being used as a monetary management objective at all.

Simplistically viewed the monetary base has not proved to be a very good criterion for monetary policy in the past year. After growth at an 8.7 percent rate for four years to late 1979, the base has continued to grow at a net 8.7 percent rate from then to August 1980 (four weeks ending December 5, 1979 to four weeks ending September 3, 1980). Not only has growth of base not been moderated, but its growth has been very erratic. Growth was 9.2 percent annual rate November-February, 5 percent annual rate February-May, and 11.9 percent annual rate from May-August judged simplistically by the base. Not only has monetary policy not shown any net tightening, but it has been disturbingly erratic.

Now we believe it important...

- (1) that the Fed publicly reaffirm its October 1, 1979, policy to gradually reduce the rate of growth of money
- (2) that the May-August growth rate of the last three months be sharply reduced
- (3) that an intent of increasing the money stock during the next four quarters at about a 4 1/2 percent per annum rate be announced
- (4) if a plan in terms of a growth rate of base should be desired, then a clause should be approved taking regard of changes in the M1B multiplier (see Federal Reserve Bank of St. Louis weekly release, page 8).

MONEY STOCK (M1B)  
(Growth Rates Per Annum)

|                                                    |           |
|----------------------------------------------------|-----------|
| IV Quarter 1975-IV Quarter 1979                    | 7.5       |
| IV Quarter 1979-IV Quarter 1980 (announced policy) | 5.25      |
| November 1979-February 1980                        | 7.6       |
| February 1980-May 1980                             | 5.2 minus |
| May 1980-August 1980                               | 17.2      |
| November 1979-August 1980                          | 6.2       |
| August 1980-August 1981 (recommended)              | 4.5       |

MONETARY BASE  
(Growth Rates Per Annum)

|                                     |      |
|-------------------------------------|------|
| I Quarter 1976-I Quarter 1980       | 8.7  |
| December 5, 1980, September 3, 1980 | 8.7  |
| November 1979-February 1980         | 9.2  |
| February-May 1980                   | 5.0  |
| May-August 1980                     | 11.9 |



## THE DOLLAR-DM RATE

Wilson E. Schmidt

Virginia Polytechnic Institute and State University

My assignment is to look into dollar-DM intervention by the central banks for those two currencies.

Last January the dollar was at the lower end of the 1.70's. The mark gradually fell until early April when it reached 1.9630. It subsequently rose to the middle 1.70's in July. Then it rose to the high 1.70's in August where it has remained until now with very little fluctuation.

According to the Fed's own report, U.S. intervention in marks during the six months ending at the end of July was about \$3.5 billion in sales and \$1.5 billion in purchases of marks on the foreign exchange market.<sup>1</sup> This compares with \$5.4 billion sales and apparently no acquisitions on the foreign exchange market in the previous six months.

During the period since January 1980 foreign official holdings of U.S. Treasuries, both marketable and nonmarketable, fell from \$109 billion to a low of \$97 billion in mid-May. By early September they were almost back to their January levels.

German international reserves excluding gold fell from a high in December of \$52.5 billion to \$46.3 billion in March and then rose in July to \$51 billion.

The U.S. authorities intervened on two occasions in early February to support the dollar. The German authorities intervened heavily to support the mark in early March with help from U.S. intervention. In April both parties first supported the mark and then later the dollar. In July, the U.S. again supported the mark, while on net balance the Germans gained reserves. In August and September intervention by both central banks in the two currencies appears to have been small — if not it has been well concealed — according to two informed observers of the foreign exchange market. Thus, recent stability of the dollar-mark rate does not appear to result from extensive intervention.

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<sup>1</sup> Federal Reserve Bank of New York Quarterly Review, Autumn, 1980.



## A NEW AND LESS FAVORABLE LOOK

Beryl W. Sprinkel  
Harris Trust and Savings Bank

Reliable economic forecasting has become increasingly difficult in recent years because of increasingly volatile economic policies. The President has presented seven economic programs not including each budget message. This calendar year there have been three formal budget projections; the most recent "Economic Revitalization Program" suggests a fourth estimate incorporating ever higher spending and lower revenue estimates.

Not only has fiscal policy changed frequently, usually in a more expansive direction, but monetary policy has been unusually volatile. As reflected in the attached chart, significant changes in monetary growth are inevitably followed by similar changes in income creation. From December 1977 to October 1978 monetary policy was highly expansive resulting in sharp increases in total demand and eventually higher inflation. M1-B growth averaged an annual rate of 8 percent. After the November 1978 Treasury-Federal Reserve announcement designed to slow inflation and rescue the sagging dollar, M1-B growth declined to an annual rate of 5.6 percent by March. Real GNP was negative in the second quarter 1979 as the economy began the descent into recession, but contrary to the Fed's stated objectives M1-B growth soared to an annual rate of 10.3 percent from March 1979 to September 1979. The faltering economy reversed direction and positive real output numbers were recorded in the ensuing three quarters.

On October 6, 1979 Chairman Volcker announced a tighter monetary policy and a change in operating procedures toward placing more emphasis on bank reserve growth and less emphasis on interest rate manipulation. From November 1979 through April 1980 M1-B declined at an annual rate of 1.5 percent and the economy dutifully reentered a recession mode in the second quarter of this year. Since April the annual rate of M1-B growth has soared to 12.3 percent with especially strong growth in June, July and August. Unless much of the recent spurt is eliminated shortly, total spending will jump once again in the fourth quarter of this year and this portion of the recession will end in the current quarter.

In our August 15 projection we assumed that third quarter M1-B growth would average 7.1 percent. This projected rate was in line with minutes subsequently released by the Federal Open Market Committee. The projected rate implied a recession low in the 4th quarter 1980. It now appears that third quarter average growth in M1-B will be about 13.8 percent; nearly double our projection and substantially above the Fed's targets.

No one knows what lies immediately ahead for monetary policy, especially in view of the approaching election. Unless the Federal Reserve abandons its fourth quarter 1979-fourth quarter 1980 target of 4-6 1/2 percent growth for M1-B, a sharp slowdown in monetary growth lies ahead. In order for the fourth quarter target to be achieved at the 6 percent rate, M1-B growth in the fourth quarter must decline to about 7 percent. The Fed has promised to reduce targets another 1/2 percent in the year ending fourth quarter 1981. Assuming growth of 7.2 percent in the fourth quarter of this year followed by a stable growth of 5 percent throughout 1981, what are the implications? Our monetarist model suggests positive real GNP numbers for the fourth quarter 1980 and the first quarter 1981, followed by negative numbers for the second and third quarter of next year; followed in turn by moderately positive numbers in the fourth quarter 1981. (See attached table.)

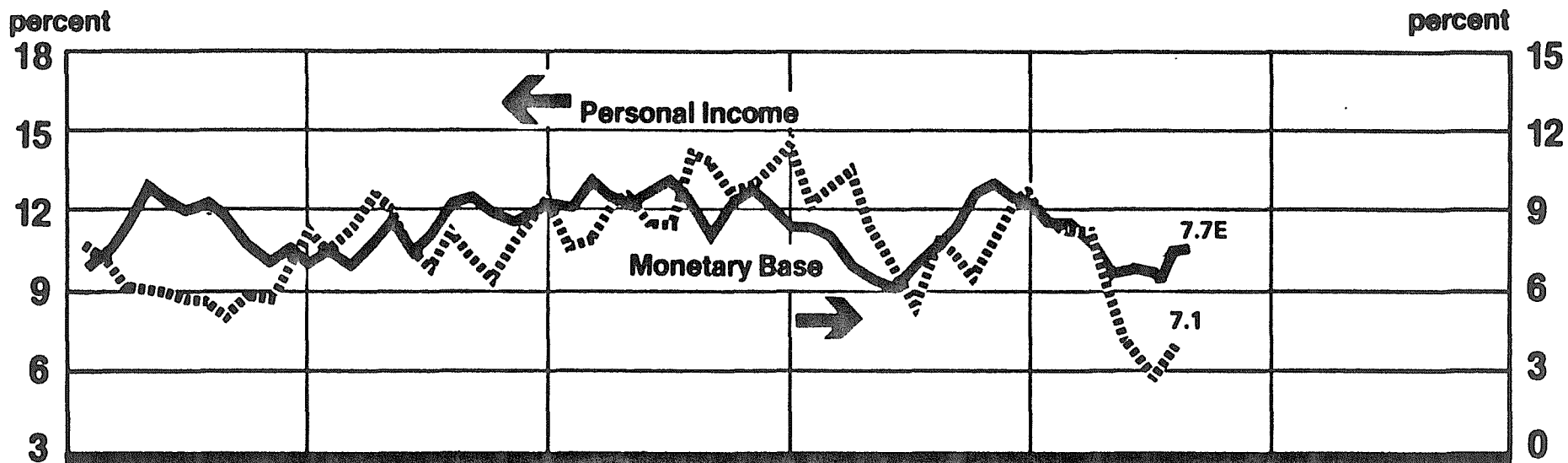
The net effect of present monetary assumptions vs. our August projections is to: (1) shorten the 1980 recession, (2) reduce the inflation rate decline, (3) reduce the interest rate decline, and (4) insure a more sluggish recovery in 1981 or even renew the recession.

Seldom has the monetary policy outlook been more uncertain. If the Fed were to promptly eliminate the recent spurt in money, the August projection would stand. If they only gradually get back on the target path, the attached projections are likely to be indicative of our future. If alternatively, targets are abandoned and massive monetary stimulus continues, 1981 will witness a sharp recovery but we will soon be back in high and rising double digit inflation and interest rates will soar.

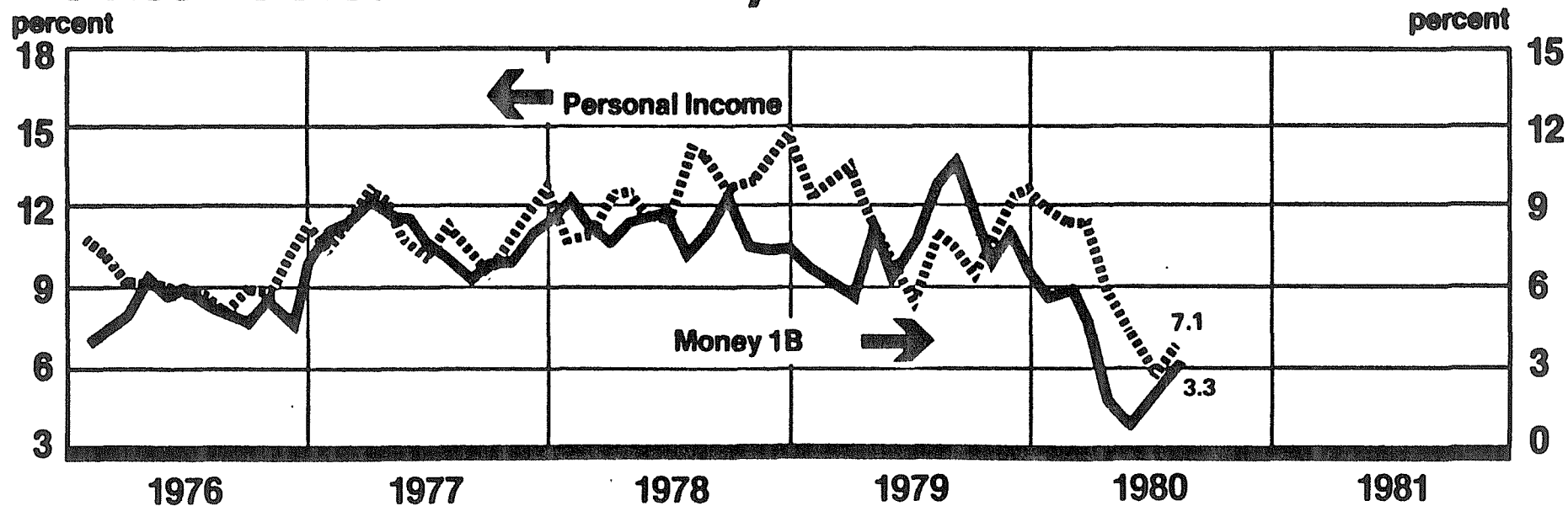
Almost certainly the open market desk is paying more attention to fed funds rates than advertised. Although the Fed proclaims allegiance to regulating bank reserves, volatile monetary growth implies an interest rate addiction. If this nation is to eventually achieve low levels of inflation and stable growth, laudable words must be followed by deeds.

Which economic scenario outlined above has the highest probability? I wish I knew for sure. My best bet is that the Fed will gradually get back on its targeted monetary path and the attached numbers will best capture our economic future. Whatever path is chosen, data on the monetary base, bank reserves and the money supply in the next few weeks should tell the story.

# Personal Income and Adjusted Monetary Base



## Personal Income and Money 1B<sup>(1)</sup>



(1) Currency and all checkable deposits at depository institutions.

All data are seasonally adjusted six month compound annual rates of change.

Source: Board of Governors of the Federal Reserve System;  
Federal Reserve Bank of St. Louis; Harris Bank



9/5/80

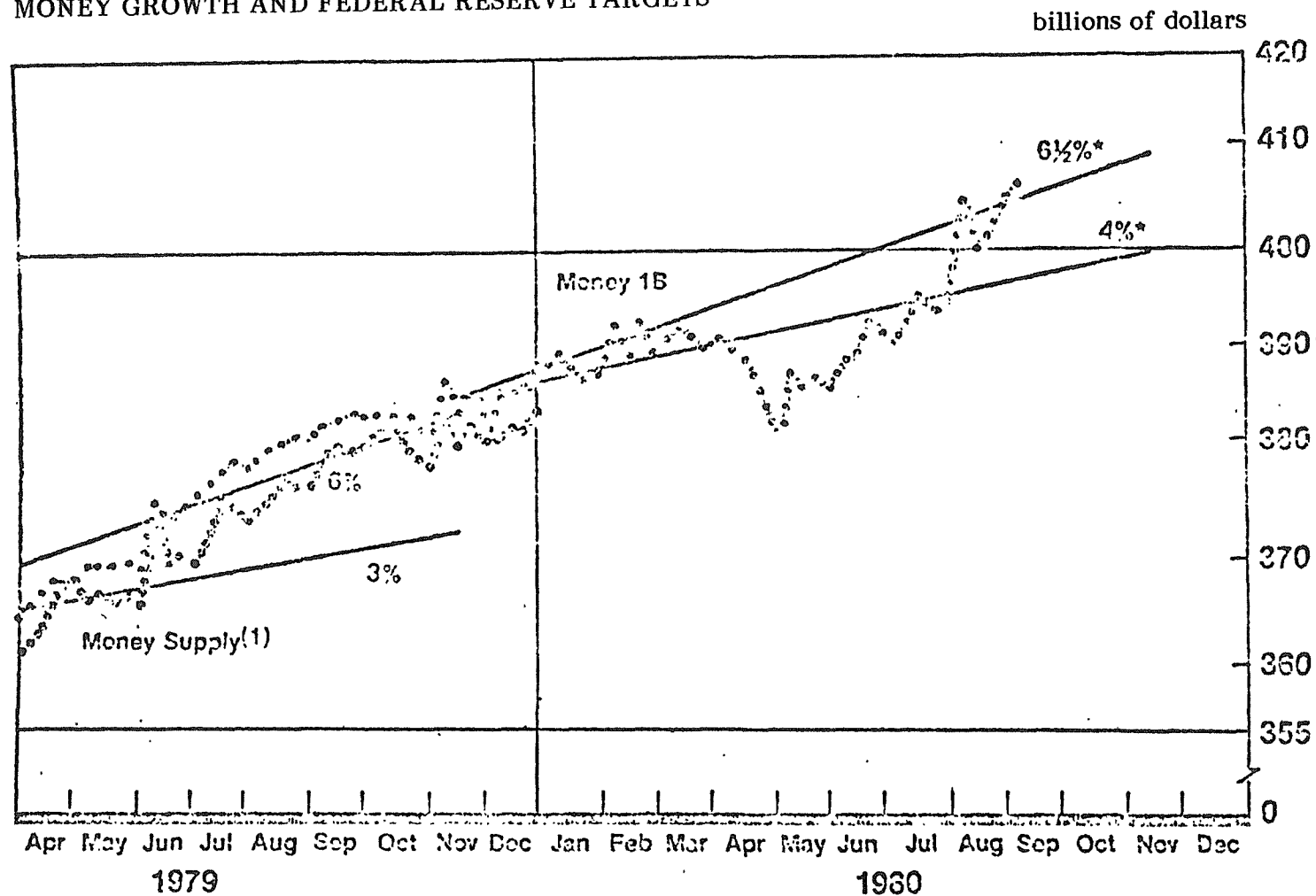
## ECONOMIC OUTLOOK

|                            | ACTUAL         |                |                | FORECAST       |                |                |                |                |                | YEARS          |                |                |               |
|----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
|                            | 1979:4         | 1980:1         | 1980:2         | 1980:3         | 1980:4         | 1981:1         | 1981:2         | 1981:3         | 1981:4         | 1978           | 1979           | 1980           | 1981          |
| GROSS NATL PRODUCT<br>%CH  | 2456.9<br>10.5 | 2520.8<br>10.8 | 2524.6<br>0.6  | 2556.5<br>5.2  | 2620.6<br>10.4 | 2708.3<br>14.1 | 2764.8<br>8.6  | 2815.3<br>7.5  | 2883.1<br>10.0 | 2127.6<br>12.0 | 2368.8<br>11.3 | 2555.6<br>7.9  | 2792.9<br>9.3 |
| CONSTANT DOLLAR GNP<br>%CH | 1440.3<br>2.0  | 1444.7<br>1.2  | 1410.9<br>-9.0 | 1399.3<br>-3.3 | 1407.7<br>2.4  | 1426.8<br>5.5  | 1422.9<br>-1.1 | 1419.0<br>-1.1 | 1427.8<br>2.5  | 1399.2<br>4.4  | 1431.6<br>2.3  | 1415.7<br>-1.1 | 1424.1<br>0.6 |
| PRICE DEFLATOR<br>%CH      | 1.7058<br>8.3  | 1.7448<br>9.5  | 1.7893<br>10.6 | 1.8270<br>8.7  | 1.8616<br>7.8  | 1.8982<br>8.1  | 1.9431<br>9.8  | 1.9840<br>8.7  | 2.0192<br>7.3  | 1.5200<br>7.3  | 1.6545<br>8.9  | 1.8057<br>9.1  | 1.9611<br>8.6 |
| CPI-ALL URBAN<br>%CH       | 2.280<br>13.6  | 2.371<br>16.9  | 2.448<br>13.7  | 2.488<br>6.7   | 2.535<br>7.8   | 2.585<br>8.1   | 2.646<br>9.8   | 2.702<br>8.7   | 2.750<br>7.3   | 1.956<br>7.7   | 2.176<br>11.3  | 2.460<br>13.1  | 2.671<br>8.5  |
| MONEY SUPPLY-(M1-B)<br>%CH | 384.5<br>5.0   | 390.2<br>6.1   | 387.9<br>-2.3  | 400.6<br>13.8  | 407.6<br>7.2   | 412.6<br>5.0   | 417.7<br>5.0   | 422.8<br>5.0   | 428.0<br>5.0   | 347.3<br>8.2   | 374.2<br>7.8   | 396.6<br>6.0   | 420.3<br>6.0  |
| PRETAX PROFITS<br>%CH      | 243.0<br>1.2   | 260.4<br>31.9  | 208.8<br>-58.7 | 194.0<br>-25.5 | 201.6<br>16.6  | 212.0<br>22.3  | 208.7<br>-6.1  | 204.4<br>-8.0  | 209.8<br>11.0  | 206.0<br>16.3  | 236.6<br>14.9  | 216.2<br>-8.6  | 208.7<br>-3.5 |
| UNEMPLOYMENT RATE          | 5.9            | 6.1            | 7.5            | 7.7            | 7.7            | 7.6            | 7.8            | 8.1            | 8.0            | 6.0            | 5.8            | 7.3            | 7.9           |
| INTEREST RATES             |                |                |                |                |                |                |                |                |                |                |                |                |               |
| NEW ISSUE AA INDUS BONDS   | 10.8           | 12.6           | 11.4           | 11.9           | 11.9           | 11.2           | 10.6           | 10.3           | 9.8            | 8.7            | 9.7            | 12.0           | 10.5          |
| PRIME RATE                 | 15.1           | 16.4           | 16.3           | 11.5           | 12.2           | 11.4           | 10.0           | 9.8            | 9.5            | 9.1            | 12.7           | 14.1           | 10.2          |
| COMMERCIAL PAPER 4 MOS 1)  | 13.3           | 14.5           | 11.1           | 9.6            | 11.2           | 9.9            | 8.5            | 8.5            | 8.5            | 8.0            | 11.0           | 11.6           | 8.8           |

## NOTE:

1) PRIOR TO NOVEMBER 1979, COMMERCIAL PAPER 4-6 MOS

# MONEY GROWTH AND FEDERAL RESERVE TARGETS



\* Federal Reserve target annual growth rates set February 5, 1980 meeting

(1) Currency and all checkable deposits at depository institutions (M1B)  
as of October 1979. Prior data reflects old M1 definition

All data are seasonally adjusted; vertical scale is logarithmic

Source: Board of Governors of the Federal Reserve System; Harris Bank



# MONETARY GROWTH

(Compound Annual Rates of Change)

|                | <u>Targets</u> | <u>12/77 to 10/78</u> | <u>10/78 to 3/79</u> | <u>3/79 to 9/79</u> | <u>12/79 to 5/80</u> | <u>5/80 to<br/>Latest Period</u> |
|----------------|----------------|-----------------------|----------------------|---------------------|----------------------|----------------------------------|
| Monetary Base  |                | 9.9                   | 6.3                  | 9.8                 | 6.2                  | 10.6                             |
| Bank Reserves  |                | 10.0                  | -0.5                 | 7.8                 | 1.0                  | 13.3                             |
| M1-A           | 3½-6%          | 7.7                   | 1.8                  | 9.1                 | -1.2                 | 11.2                             |
| M1-B           | 4-6½%          | 8.0                   | 6.5                  | 10.9                | -0.1                 | 14.1                             |
| M <sub>2</sub> | 6-9%           | 8.4                   | 7.4                  | 10.7                | 5.9                  | 14.4                             |

Latest 4 week ending average, expect M<sub>2</sub>, latest month.

Source: Federal Reserve Board and St. Louis Federal Reserve Bank.

Date: September 19, 1980



## MONETARY POLICY, FISCAL POLICY AND INTEREST RATES

Jerry L. Jordan  
University of New Mexico

The biggest single problem with national economic policies is that nobody believes that inflation will be reduced significantly during the next few years. The President of the Deutsche Bundesbank characterized the problem quite well recently when he remarked that "Inflation is like toothpaste. Once it's out, you can hardly get it back in again. So the best thing is not to squeeze too hard on the tube."

In the U.S., the monetary and fiscal authorities squeezed too hard for much too long, the inflationary paste is out of the tube, and the public is skeptical about any talk of ever getting it back in again. When politicians such as Senator Kennedy and Congressman Anderson endorse mandatory controls, it reveals a lack of willingness to even try to correct the fundamental problems that cause inflation. The Carter Administration has frequently announced laudable intentions to reduce inflation, but their failure to make progress on that, or any of their other economic objectives, leaves little reason to believe that they are on the verge of starting to understand the problem and beginning to adopt workable solutions.

With the help of political cartoonists, the public finds it hard to believe that Governor Reagan's proposed tax cuts coupled with increased military spending will lead to lower inflation. Successive Chairmen of the Federal Reserve have made declarations of a renewed commitment to combat inflation with such increasing frequency during the past fifteen years, only to be abandoned before lasting progress was made, that the Federal Reserve is no longer viewed as a solid bastion against inflationary forces. Once again during the past year, the Federal Reserve's Chairman has said all the right things, and on balance policy actions have moved in a less inflationary direction; however, the erratic pattern of monetary growth and extreme volatility of interest rates has contributed to doubts that our central bank has the knowledge or the will to persevere.

There are three main policy options available at the present time. One would be to permit the recent reacceleration of monetary growth to continue in order to

stimulate recovery from the recession. That would most likely produce inflation and market interest rates that were even higher than experienced earlier this year.

A second option would be to simply impose pervasive and mandatory controls to deal with inflation in the short run, while monetary and fiscal policies were geared to stimulate growth of output and employment. The ultimate results of that set of policies would be catastrophic.

The third policy option would be to sharply curtail monetary growth over the next few years. That would reduce inflation, but it also would be accompanied by slow growth of output and employment for a longer period than most people think is politically tolerable. Whether the growth that did occur was in the form of current consumption or capital formation would depend on the growth of government spending and the Federal tax policies that accompany the monetary restraint. It is hard to find a very strong constituency for such a policy. Other than professional economists, there are few people who argue that the adverse side-effects of prolonged austerity are worthwhile. Neither business leaders nor labor leaders can be counted upon to argue consistently and persistently that inflation must be reduced at all costs. They are not easily going to accept, let alone advocate, that declining (or at least sluggishly growing) earnings and real wages are desirable or even necessary.

Nevertheless, I believe that the environment of the next few years will be one of the slow real growth, declining inflation, and gradually falling interest rates. The rhetoric surrounding national economic policies has changed in the past couple of years, and there are reasons for hoping that the policies also will be different. As Helmut Schmidt said last year, "the silly little locomotive theory is dead." Using the "shotgun approach" of general monetary and fiscal stimulus in an effort to "spend our way to prosperity" is no longer acceptable in Europe, and I do not believe the U.S. Congress is as enamored with that approach as it once was. In 1978, Congress cut corporate tax rates and reduced the capital gains tax over the vigorous objections of the Administration. Since then, the primary focus of fiscal discussions in Congress has been on stimulating saving and investment, concern over declining productivity, and the realization that our capital stock is both economically and technologically obsolete. There has not been talk of "quick-fixes" of sagging final demand through \$50 tax rebates or some other gimmick. The old approach of pumping up retail sales is not commanding the attention it once did.

Monetary growth in the U.S. has been sharply reduced on balance during the past year, mainly because developments in international markets dictated that it be

done. The pattern of monetary growth has been disturbing, and it would be premature to conclude that a significant re-acceleration will not occur. However, there also is no basis for extrapolating the sharp re-acceleration of monetary growth this past summer into the indefinite future. It would have been incorrect to base forecasts of the economy on an extrapolation of the very sharp contraction of monetary growth in the spring quarter, and the same is true of the rapid growth in the summer quarter.

From the third quarter of 1979 to the present quarter, M1B has increased by only about 5 percent, down considerably from the 8.3 percent growth that occurred in the preceding year. Even if monetary growth continued for the next few years at the upper-end of the Fed's currently announced target range, it would imply no more than a 6 to 7 percent rate of inflation. The prospect of monetary growth above the Fed's current target range would be conditioned by the outlook for monetary growth in other major countries. The deceleration of monetary growth in other countries has been even sharper. If the West German monetary authorities persist in their determination to eliminate inflation of the D-Mark through stringent control over their money supply, then the pressures on our central bank, as well as several others, to move in the same direction will be considerable.

The growth of government spending provides less basis for optimism about the next few years. At mid-year, the Congressional Budget Office estimated that Federal outlays in fiscal 1980 will be 17.5 percent greater than last year. Whether it is that much or not, Federal government spending is rising sharply as a percent of national income this year, and that is a major problem. For fiscal 1981, the CBO has estimated a further increase of outlays of over 9 percent. Since the lower growth rate next year is on top of a very high base, and actual spending has exceeded projections so regularly in recent years, the fiscal picture remains dismal.

The Congressional Budget Office projected nominal income growth next year of 10.4 to 14.6 percent, which is composed of 2.5 to 4.5 percent real growth and 7.7 to 9.7 percent inflation. They assumed that the growth of M1B on average during 1980 and 1981 would be near the 5 1/4 percent mid-point of the Fed's announced long-run target range. There is a serious consistency problem in these numbers because a 14.6 percent growth of nominal income growth next year would not be likely even if M1B growth was at the upper-end of the Fed's target range. Over 8 percent growth of M1B velocity is simply too much to expect.

The lower-ends of the CBO ranges for next year—nominal GNP growth of 10 to 10.5 percent, real output of 2 to 2.5 percent, and inflation of about 7.5 to 8

percent—is the most that should be expected if the Fed remains within their monetary growth target ranges.

In that kind of economic environment, long-term market interest rates would gradually drift lower on balance, with yields on U.S. Government bonds and highest quality corporate securities declining about 100 to 150 basis points from current levels to the end of next year. The decline of short-term yields on balance by the end of next year should be somewhat greater—three-month Treasury bill yields would fall to the 6 to 7 percent range. But the decline of interest rates through next year is likely to be interrupted by short periods of rising rates, just as the three years of rising rates from early 1977 to early this year were punctuated by several short periods of declining rates. The previous period of declining interest rates, from the late summer of 1974 to early 1977 was interrupted by major up-ticks of interest rates in mid-1975 and mid-1976, and the pattern I have in mind for this year and next would be similar.

Ultimately, interest rate movements will reflect perceived real returns to real capital and the expected rate of inflation. Since real returns to real capital are strongly influenced by the mix of fiscal policies, and past actual and future expected monetary growth influence expectations about inflation, if you look at the assumptions underlying the wide range of forecasts for our economy for the next few years, you will find that the differences are the result of different degrees of confidence that monetary and fiscal policies during the next few years will be different than the past few decades.

The pursuit of a restrictive anti-inflationary monetary policy as outlined by the Federal Reserve, in the face of the fiscal program implied by the Administration's budget projections, would mean that private sector saving and investment would be severely squeezed for an extended period of time. When fiscal policies are expansionary, the impact of restrictive monetary policies falls on savings and investment. However, since the mood of Congress seems to be one of concern over the deterioration of our capital stock, our productivity, and our industrial competitiveness, I believe Congress will take actions to stimulate savings and investment and to enhance the prospects for improved productivity. But, if the government's share of national income is rising, efforts to change the mix of the private sector's shrinking share from consumption to investment cannot be successful while the nation's central bank bears the sole burden of combating inflation.

It is my conclusion that if the fiscal program does not also become strongly anti-inflationary, restrictive monetary policies will not be sustained sufficiently long to be successful. If the government's command over the nation's real resources actually grows at the rates projected in the Administration's five-year budget, there is no reason to expect the performance of our economy to be any better in the next five years than the dismal record of the past five years. Alternatively, a goal of limiting government spending as a percent of GNP to less than 20 percent through 1985 would reinforce the Federal Reserve's actions which would finance less than 3 percent inflation by 1985. Along the way, we would hear a lot of complaining about the "loss of output" and the "gap" between so-called potential output and actual output, but the patience would ultimately pay-off in a vigorous investment led expansion.

My optimism about the economic outlook is probably not the safest view to build into a "most likely" alternative in a corporate planning exercise, but I believe that it is one that should be considered in the array of possibilities. Chief executive officers will not like the earnings implications for the next couple of years, but you are not being paid to tell them only what they want to hear.

## ECONOMIC PROJECTIONS

Table I  
(percent changes)

### Projections for 1980 as of February, 1980 meeting

|                 | <u>GNP</u> | <u>Output</u> | <u>Deflator</u> | <u>M<sup>1</sup></u> | <u>V<sup>1</sup></u> | <u>M<sup>2</sup></u> | <u>V<sup>2</sup></u> | <u>MB</u> | <u>VB</u> |
|-----------------|------------|---------------|-----------------|----------------------|----------------------|----------------------|----------------------|-----------|-----------|
| Q4/79-<br>Q4/80 | 7.4        | -1.1          | 8.6             | 4.4                  | 2.9                  | 7.2                  | 0.1                  | 6.0       | 1.3       |
| 1970-<br>1980   | 7.9        | -0.8          | 8.9             | 5.2                  | 2.3                  | 8.1                  | -0.2                 | 7.3       | 0.6       |

Soon after the meeting of the SOMC last February, the Federal Reserve redefined the monetary aggregates. Data for the old M1 and M2 are no longer available. New measures, M1A and M1B, were introduced and M2 was redefined. Comparable data for the old M1 and M2 are not available.

Table II  
(percent changes)

|                 | <u>Projections for 1980 as of September, 1980 meeting</u> |               |                 |            |            |           |           |
|-----------------|-----------------------------------------------------------|---------------|-----------------|------------|------------|-----------|-----------|
|                 | <u>GNP</u>                                                | <u>Output</u> | <u>Deflator</u> | <u>M1B</u> | <u>V1B</u> | <u>MB</u> | <u>VB</u> |
| Q4/79-<br>Q4/80 | 8.0                                                       | -1.0          | 9.0             | 5.1        | 2.8        | 7.8       | 1.4       |

The erratic pattern of monetary growth so far in 1980, has not served to reinforce confidence that "something has changed" since the October 6, 1979, actions and announcements by the Federal Reserve. Had the sharp contraction of the monetary growth in Q2/80 continued, a severe economic contraction would have been likely. Similarly, if the extremely rapid acceleration in the growth of both M1B and the monetary base during Q3/80 were to continue, a sharp acceleration of inflation would be expected to follow.

On balance for the past four quarters, Q3/79-Q3/80, growth of money has not accelerated. The growth of M1B was about 5 percent, compared with 8.3 percent during the previous four quarters. The growth of the monetary base was about the same as the 8.2 percent growth during the previous four quarters. The decline in both final sales and real output during Q2/80 was especially sharp because of the effects of the credit controls. The result was that all of the decline of output that had been expected for 1980, occurred during one quarter.

Table III  
(percent changes)

|                | <u>Projections for 1981 as of September, 1980 meeting</u> |               |                 |            |            |           |           |
|----------------|-----------------------------------------------------------|---------------|-----------------|------------|------------|-----------|-----------|
|                | <u>GNP</u>                                                | <u>Output</u> | <u>Deflator</u> | <u>M1B</u> | <u>V1B</u> | <u>MB</u> | <u>VB</u> |
| Q4/80<br>Q4/81 | 9.6                                                       | 1.8           | 7.7             | 5.0        | 4.4        | 7.0       | 1.5       |

As indicated in Table III, a continuation of M1B growth in 1981, at about the same rate as in the past year on balance would imply little growth of real output unless inflation decelerates at a more rapid rate than indicated.

The Congressional Budget Office has made projections for 1980, and 1981, based on assumptions that include growth of M1B during 1980, and 1981, at the 5.2 percent mid-point of the Fed's announced target range. Table IV shows the CBO projections.

SUMMARY TABLE IV

Economic Projections for Calendar Years 1980 and 1981, Based on Policies of the First Budget Resolution for Fiscal Year 1981

| Economic Variable                                  | 1978:4<br>to 1979:4<br>(actual) | 1979:4<br>to 1980:4 | 1980:4<br>to 1981:4 |
|----------------------------------------------------|---------------------------------|---------------------|---------------------|
| Nominal GNP (percent change)                       | 9.9                             | 3.7 to 7.8          | 10.4 to 14.6        |
| Real GNP (1972 dollars, percent change)            | 1.0                             | -4.3 to -2.3        | 2.5 to 4.6          |
| General Price Index, GNP Deflator (percent change) | 8.9                             | 8.3 to 10.3         | 7.7 to 9.7          |
| Unemployment Rate, End of Period (percent)         | 5.9                             | 8.4 to 9.4          | 8.4 to 9.4          |

SOURCE: Congressional Budget Office

The upper-ends of the CBO projections for nominal GNP in 1981, imply an M1B velocity increase of over 8 percent next year, which is not likely. The lower ends of the CBO projected ranges are the maximum rates of growth that should be expected, even if M1B were to grow at the upper ends of the Fed's range. However, since NOW accounts will be introduced nationwide on January 1, 1981, the velocity associated with a given growth rate of M1B should be lower than otherwise.